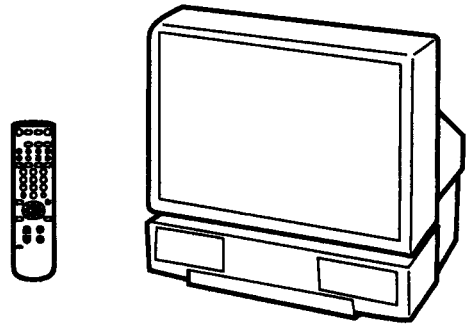
SERVICE MANUAL

RA-2 CHASSIS

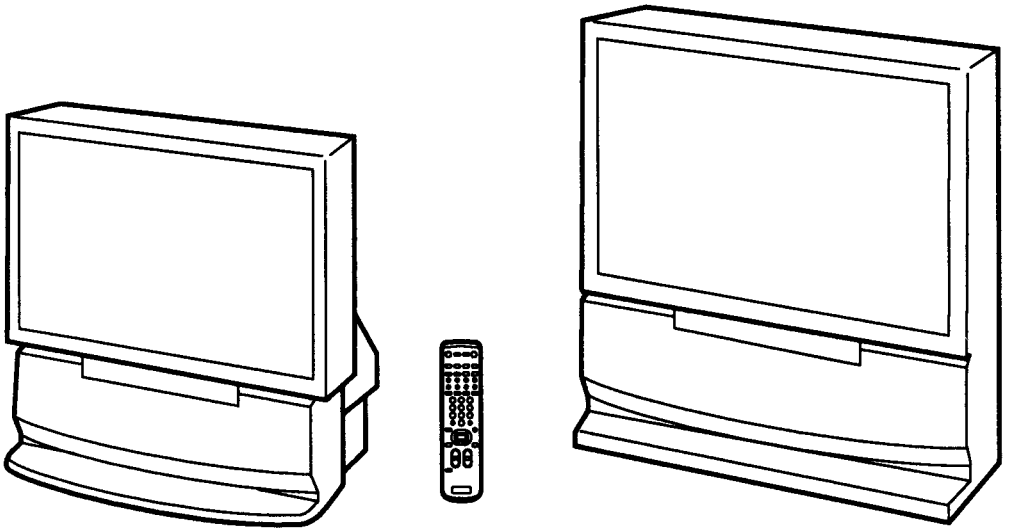
MODEL	COMMANDER	DEST.	CHASSIS NO.
KP-41T35	RM-Y136A	US	SCC-K90G-A
KP-41T35	RM-Y136A	Canadian	SCC-N22C-A
KP-48V45	RM-Y901	US	SCC-K90F-A
KP-53V45	RM-Y901	US	SCC-K90E-A
KP-53V45	RM-Y901	Canadian	SCC-N22D-A

MODEL	COMMANDER	DEST.	CHASSIS NO.
KP-61V45	RM-Y901	US	SCC-K90H-A
KP-61V45	RM-Y901	Canadian	SCC-N22E-A

996515301



RM-Y136A KP-41T35



KP-48V45/53V45 RM-Y901 KP-61V45

MICROFILM

COLOR REAR VIDEO PROJECTOR

SONY

※ Please file according to model size. ..... ■

41 48 53 61

SPECIFICATIONS

Projection system 3 picture tubes, 3 lenses, horizontal in-line system

Picture tube 7 inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system

Projection lenses High performance, large-diameter hybrid lens F1.1

Screen size (measured diagonally)

KP-41T35	41 inches
KP-48V45	48 inches
KP-53V45	53 inches
KP-61V45	61 inches

Television system American TV standards

Channel coverage VHF: 2 – 13 / UHF: 14 – 69 / CATV: 1 – 125

Antenna 75 ohm external antenna terminal for VHF/UHF

Inputs/output

VIDEO IN 1
VIDEO 2 INPUT
S VIDEO (4-pin mini DIN):
Y: 1 Vp-p, 75-ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal)
75 ohms
VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative
AUDIO (phono jacks): 500 mVrms (100% modulation)
Impedance : 47 kilohms
VIDEO IN 3
VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative
AUDIO (phono jacks): 500 mVrms (100% modulation)
Impedance: 47 kilohms
TV OUT
MONITOR OUT
VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative
AUDIO (phono jacks)
500 mVrms (100% modulation),
Impedance: 10 kilohms
AUDIO (VAR/FIX) OUT (phono jacks)
900 mVrms (100% modulation)
Impedance: 5 kilohms
(for KP-48V45/53V45/61V45)
AUDIO OUT (phono jacks): 900 mVrms (100% modulation)
Impedance: 5 kilohms
(for KP-41T35)

Speaker Full range speaker 100 mm (3.9 inches) diameter

Speaker output 15 W × 2
CENTER SPEAKER IN: 30 W × 1 (NORMAL), 60 W × 1 (MAX), 16 ohms
(for KP-48V45/53V45/61V45)
10 W × 2
(for KP-41T35)

Power requirement
120 V, 60 Hz

Power consumption
175 W
Standby mode: 3 W
(for KP-48V45/53V45/61V45)
165 W
Standby mode: 3 W
(for KP-41T35)

	Dimensions(W/H/D)	Mass
KP-41T35	951 × 1,022 × 602 mm (37 1/2 × 40 1/4 × 23 3/4 inches)	55 kg (121 lbs 4 oz)
KP-48V45	1,106 × 1,337 × 571 mm (43 5/8 × 52 3/8 × 22 1/2 inches)	70 kg (154 lbs 5 oz)
KP-53V45	1,218 × 1,413 × 614 mm (48 × 55 5/8 × 24 1/4 inches)	73 kg (161 lbs 2 oz)
KP-61V45	1,338 × 1,506 × 642 mm (52 3/4 × 59 3/8 × 25 3/8 inches)	124 kg (273 lbs 9 oz)

Supplied accessories
Remote control RM-Y901 (1)
(for KP-48V45/53V45/61V45)
Remote control RM-Y136A (1)
(for KP-41T35)
Size AA (R6) battery (2)

Optional accessories
U/V mixer EAC-66
Connecting cables RK-74A, VMC-810S/820S, YC-15V/30V, VMC-720M
Stand SU-41T2 (*For KP-41T35*)

Design and specifications are subject to change without notice.

(●)* SRS (SOUND RETRIEVAL SYSTEM)

The (● SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pendeing.

The word 'SRS' and the SRS symbol (●) are registered trademarks of SRS Labs, Inc.

SAFETY CHECK-OUT

(US Model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.

2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.

3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.

4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.

5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.

6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.

7. Check the B+ and HV to see if they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.

8. Check the metal trim, metallized knobs, screws, and all other exposed metal parts for AC leakage.
   Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufactures' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

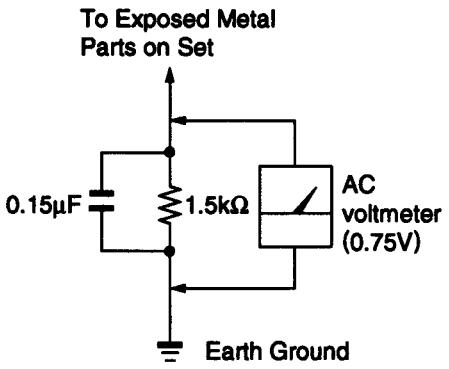


Fig. A. Using an AC voltmeter to check AC leakage.

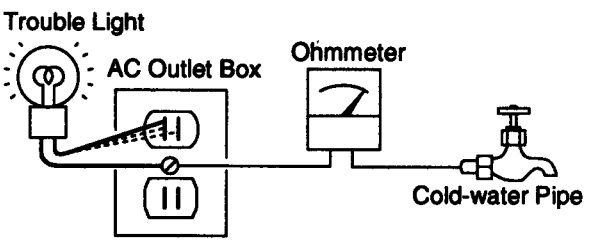


Fig. B. Checking for earth ground.

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(CAUTION)
SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!
AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)
APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!
AFIN D'EVITER TOUT RESQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!
LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SECTION 1
GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

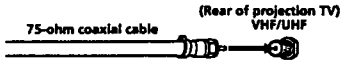
Step 2: Hookup

Although you can use either an indoor or outdoor antenna with your projection TV, we recommend that you connect an outdoor antenna or a cable TV system to get better picture quality.

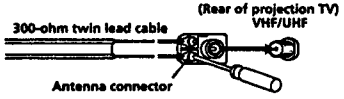
Connecting an antenna

Connect your antenna cable to the VHF/UHF antenna terminal. If you cannot connect your antenna cable directly to the terminal, follow one of the instructions below depending on your cable type.

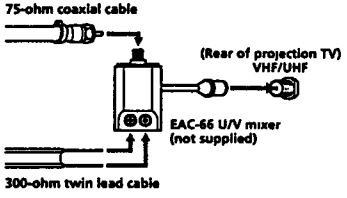
A
• VHF only
or
• VHF/UHF
or
• Cable



B
• VHF only
or
• UHF only
or
• VHF/UHF



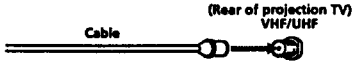
C
• VHF
and
• UHF



Notes
- Most VHF/UHF combination antennas have a signal splitter. Remove the splitter before attaching the appropriate connector.
- If you use the U/V mixer, snow and noise may appear in the picture when viewing cable TV channels over 37.

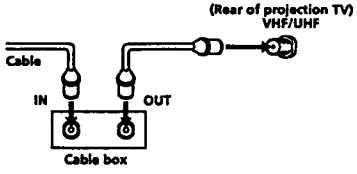
Connecting an antenna/cable TV system without a VCR

To cable or antenna

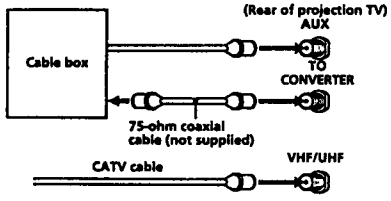


To cable box

If your cable company requires you to connect a cable box, make the connection as follows:



To cable box and cable

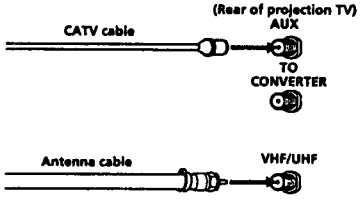


Pay cable TV systems use scrambled or encoded signals requiring a cable box* in addition to the normal cable connection.

* The cable box will be supplied by the cable company.

Note
- You cannot watch the signal through an AUX connector as a window picture.

To cable and antenna



Note
- Do not connect anything to the TO CONVERTER connector in this case

Connecting an antenna/cable TV system with a VCR

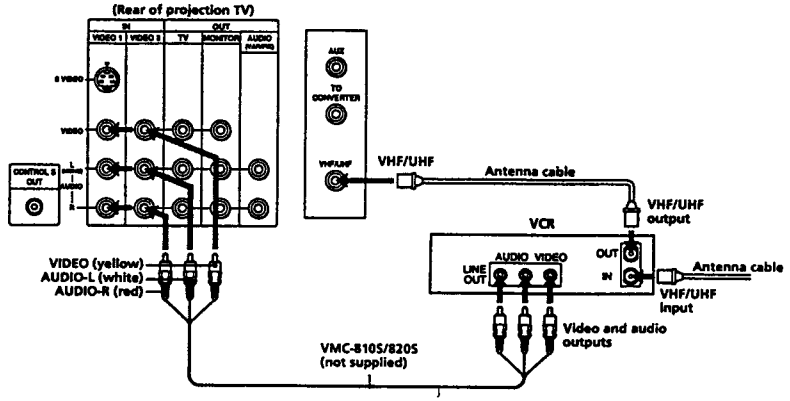
For details on connection, see your VCR instruction manual.
Before making the connection, disconnect the AC power cords of the equipment to be connected.

After making these connections, you will be able to do the following:
- View the playback of video tapes
- Record one TV program while viewing another program
- Watch two TV programs at once using PIP

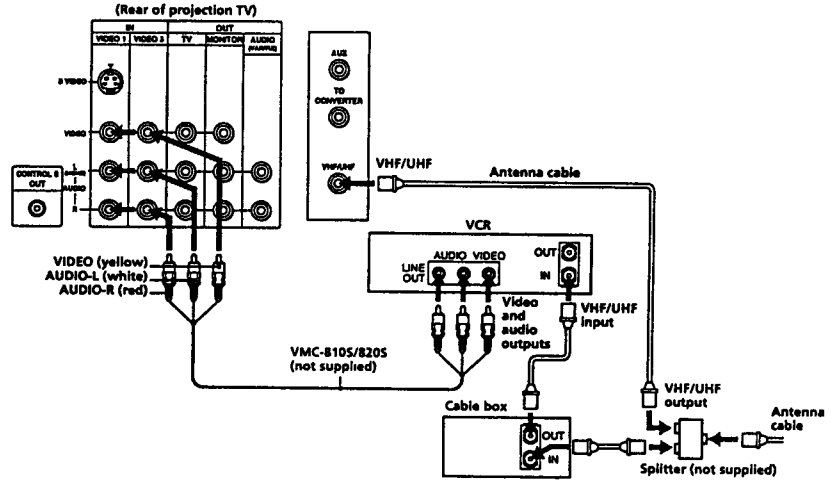
To a conventional VCR

Note
- To connect a monaural VCR, connect the audio output of the VCR to AUDIO-L (MONO) of VIDEO 1/3 IN on the projection TV.

Without a cable box



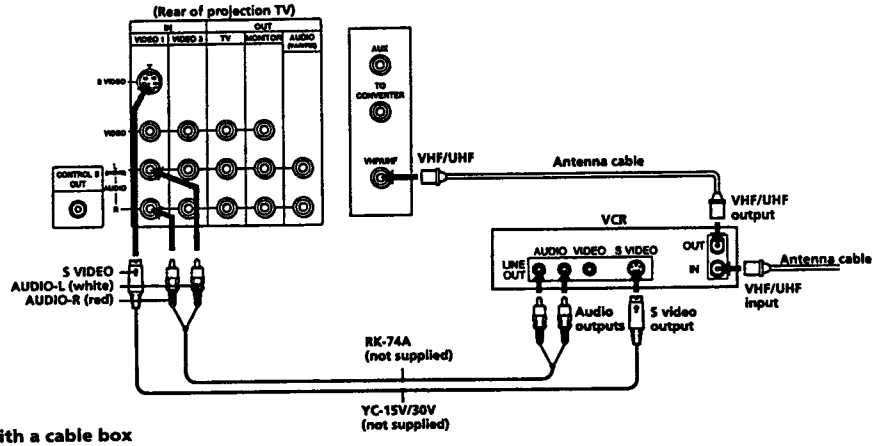
With a cable box



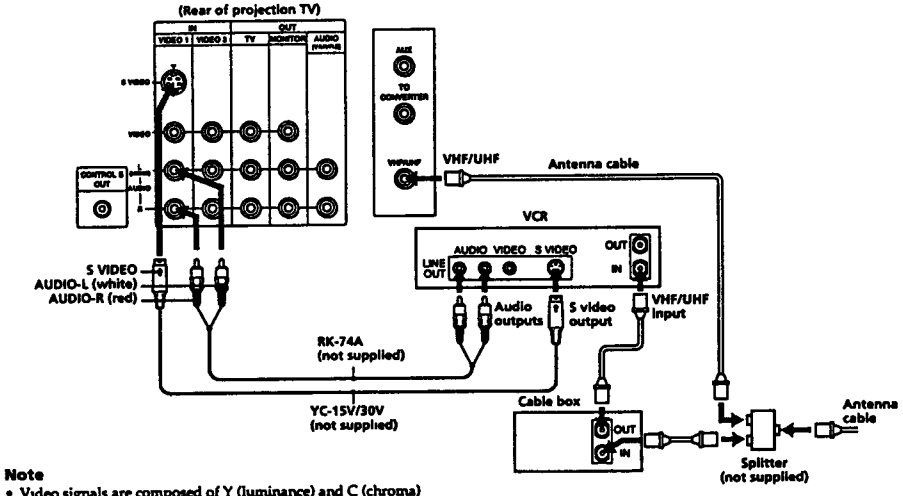
To an S video equipped VCR

If your VCR has an S VIDEO output connector, make the following connections.
Whenever you connect the cable to the S VIDEO input connector, the projection TV automatically receives S video signals.

Without a cable box



With a cable box



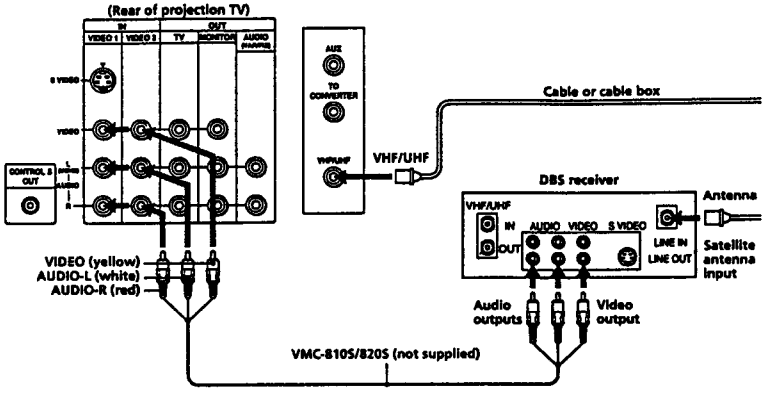
Note

- Video signals are composed of Y (luminance) and C (chroma) signals. The S connection sends the two signals separately preventing degradation, and gives better picture quality compared to conventional connections

Connecting a DBS receiver

For details on connection, see the instruction manual of the DBS (Digital Broadcasting Satellites) receiver.

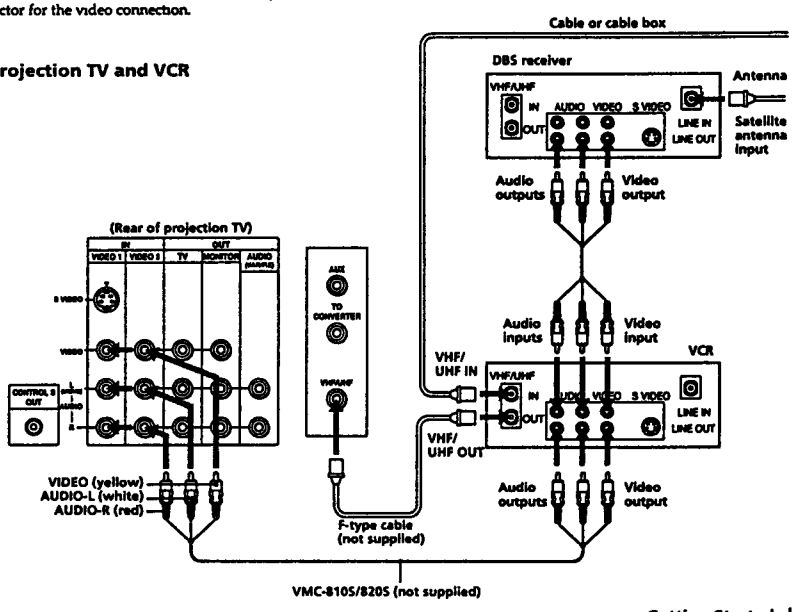
To a projection TV



Note

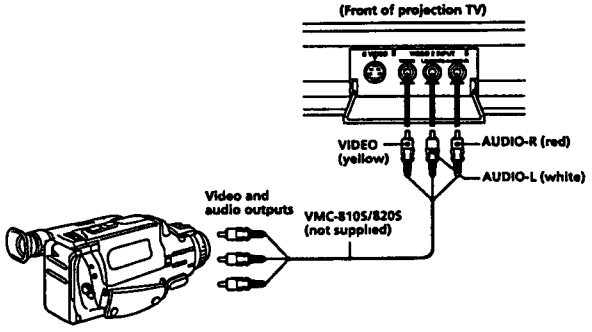
- You can use the S VIDEO connector or the composite video connector for the video connection.

To a projection TV and VCR



Connecting a camcorder

Use this connection to view a camcorder picture.

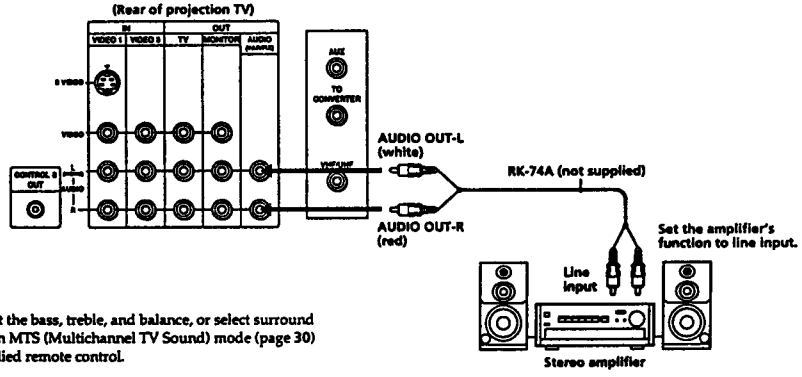


Notes

- To connect a monaural camcorder, connect the audio output of the camcorder to AUDIO-L (MONO) of VIDEO 2 INPUT on the projection TV.
- To connect a camcorder equipped with the S video output, connect the S video output of the camcorder to the S VIDEO connector of the projection TV.

Connecting an audio system

When connecting audio equipment, see page 28 for more information.

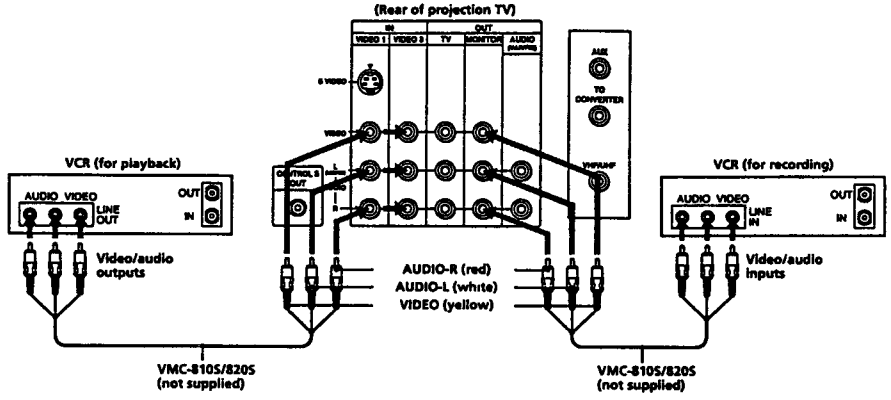


Note

- You can adjust the bass, treble, and balance, or select surround (page 29) or an MTS (Multichannel TV Sound) mode (page 30) with the supplied remote control.

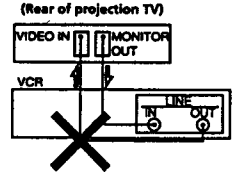
Connecting two VCRs for tape editing using MONITOR OUT

You can record input images displayed on the screen. This type of connection should be used only when you connect from the line input of one VCR, and from the line output of a second VCR.



Notes

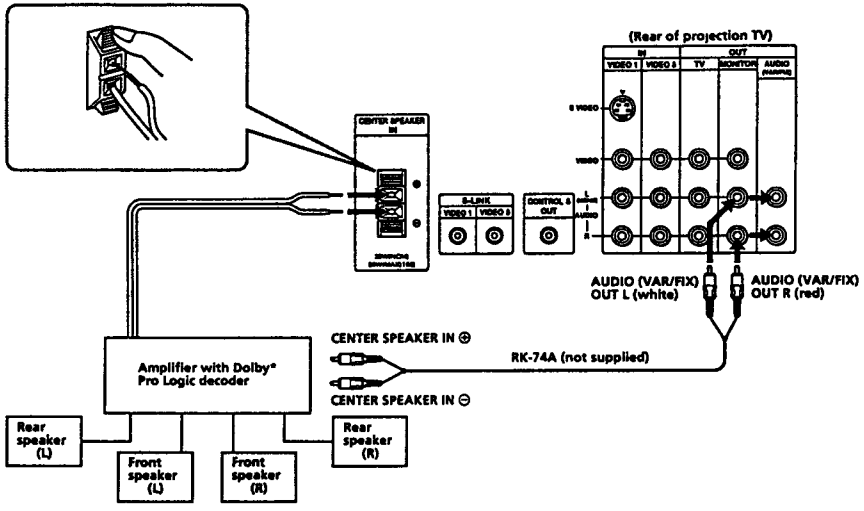
- Do not change the input signal while editing through MONITOR OUT, or the output signal will also change.
- You can use the S video jack to connect a VCR for playback and the composite video connector to connect a VCR for recording.
- When connecting a single VCR to the projection TV, do not connect the MONITOR OUT to the VCR's line input, while at the same time connecting from the projection TV's VIDEO IN connectors to the VCR's line output, as shown below.



Connecting an amplifier with Dolby Pro Logic decoder

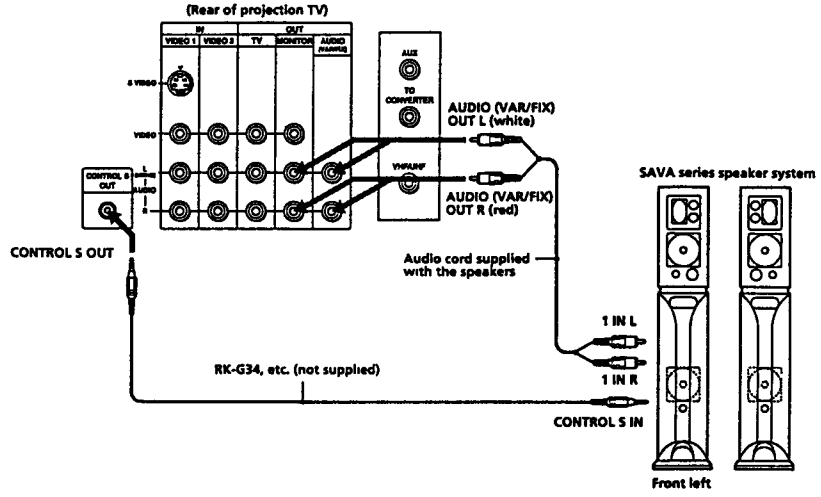
If you use an amplifier with Dolby Pro Logic decoder instead of the projection TV's audio system, you can still use the projection TV's center speaker. See "Setting the speaker switch (SPEAKER)" on page 31.

* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under Canadian patent number 1,037,877. "Dolby," the double-D symbol ⧈ and "Pro Logic" are trademarks of Dolby Laboratories Licensing Corporation.



Connecting a Sony SAVA series speaker system

If you have a Sony SAVA series speaker system, connect your speakers to the AUDIO (VAR/FIX) OUT jacks (or MONITOR OUT jacks) on the rear of the projection TV with the audio cable supplied with the speakers. You can take advantage of the speakers' Dolby Pro Logic surround system and super woofer mode, and control them with the supplied remote control. When connecting a Sony SAVA series speaker system, see page 31 for more information.



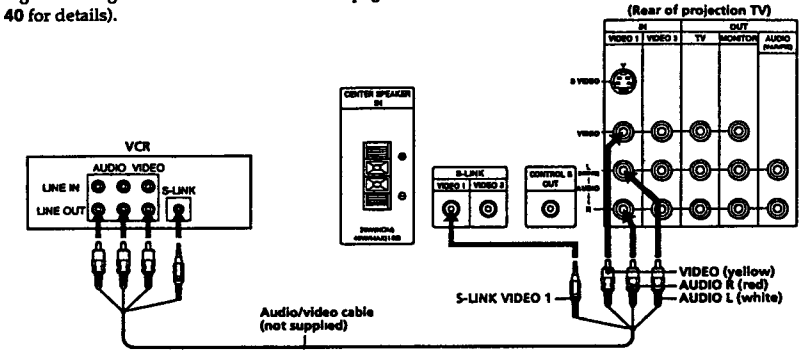
Using the S-Link function with S-Link capable Sony VCRs

The S-Link feature allows you to operate the projection TV and VCR with the S-Link function in the following ways:

- When you press the VCR's play button, the projection TV's input mode is automatically changed to video input which is connected, and the VCR starts playing a tape.
- You can turn off the projection TV and VCR together using the SYSTEM OFF button (see page 40 for details).

Notes

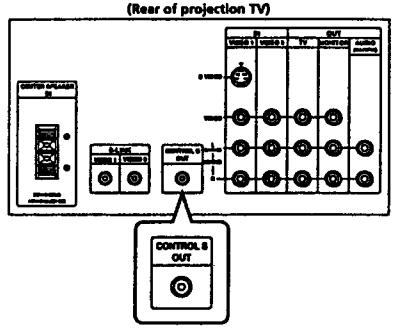
- The projection TV may malfunction if you connect the S-Link cable to the projection TV without connecting the other end of the cable to the VCR.
- When making the S-Link connection, be sure to insert all the connectors firmly.



Connecting other Sony equipment with CONTROL S jack

This feature allows you to control your projection TV and other Sony equipment with one remote control.

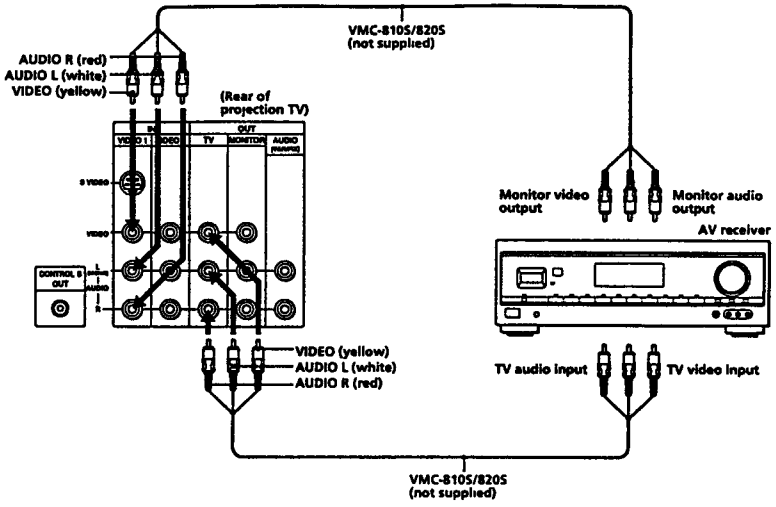
To control other Sony equipment with the projection TV's remote control, connect the input of the equipment to CONTROL S OUT jack on the projection TV.



Connecting an AV receiver

Connect an optional AV receiver to the VIDEO 1 IN jacks at the rear of the projection TV.

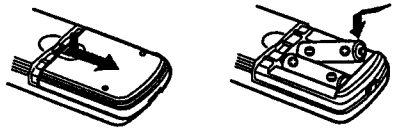
If your AV receiver has the TV input jacks, connect them to the TV OUT jacks at the rear of the projection TV.



Step 3: Setting up the remote control

Inserting batteries

Insert two size AA (R6) batteries (supplied) by matching the + and – on the battery to the diagram inside the battery compartment.



Notes

- Under normal conditions, batteries will last up to six months. If the remote control does not operate properly or the indicators of the buttons on the remote control do not light up, the batteries may be worn out. When replacing batteries, replace both of them with new ones.
- Do not mix old batteries with new ones or mix different types of batteries together.
- If the electrolyte inside the battery should leak, wipe the contaminated area of the battery compartment with a cloth and replace the old batteries with new ones. To prevent the electrolyte from leaking, remove the batteries when you don't plan to use the remote control for a long period of time.
- Do not handle the remote control roughly. Do not drop it, step on it, or let it get wet.
- Do not place the remote control in direct sunlight, near a heater, or where the humidity is high.

Getting to know buttons on the remote control

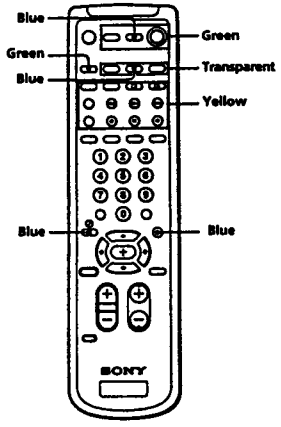
Names of buttons on the remote control are indicated in different colors to represent the available functions.

Button color

Transparent (light up) ..... TV/VCR/DBS/Cable box function buttons. Press the appropriate function button first to change the remote control's function.
Green ..... Buttons relevant to power operations.

Label color

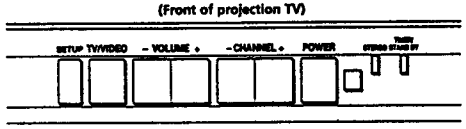
White ..... TV/VCR/DBS/Cable box operation buttons.
Yellow ..... PIP operation buttons.
Blue ..... DBS operation buttons.



Step 4: Setting up the projection TV automatically

(AUTO SET UP)

You can set up your projection TV easily by using the AUTO SET UP feature. It presets all the receivable channels, adjusts the convergence and changes the on-screen menu language. To set up the projection TV manually, see "Adjusting convergence" (page 19), "Setting cable TV on or off" (page 20), "Presetting channels" (page 21) and "Changing the menu language" (page 21).
If the projection TV is set to a video input, you cannot perform AUTO SET UP. Press TV/VIDEO so that a channel number appears.

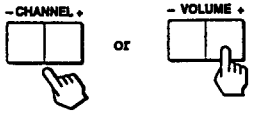


Before you start using AUTO SET UP, be sure to connect the antenna or cable to the projection TV (see page 6).

1 Press POWER to turn the projection TV on.

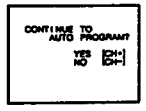
2 Press SETUP on the front of the projection TV.
AUTO SET UP screen appears.

3 Press CHANNEL +/– or VOLUME + to select the on-screen menu language.
If you prefer Spanish or French to English, you can change the on-screen menu language.



All of the menus will be set to the factory preset condition in the selected language.

4 Press VOLUME – to start AUTO SET UP.

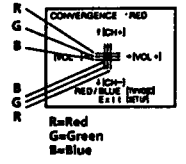


5 Press CHANNEL + to preset channels.

"AUTO PROGRAM" appears on the screen and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the following menu appears. If the projection TV receives cable TV channels, CABLE is set to ON automatically.

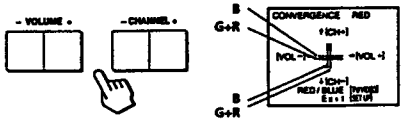
To exit AUTO PROGRAM
Press any button.

6 Adjust convergence.
(1) Press CHANNEL +.
The CONVERGENCE adjustment screen appears.



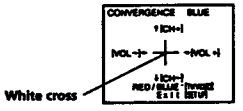
(2) Press TV/VIDEO to select RED or BLUE.

(3) Using CHANNEL +/– or VOLUME +/–, move the line until it converges with the center green line.



To move horizontal line up/down, press CHANNEL +/–.
To move vertical line right/left, press VOLUME +/–.

(4) Repeat steps (2) and (3) to adjust the other lines until all three lines converge and are seen as a white cross.



Note

- Using the AUX connector, press TV (black button) first and make sure that "AUX" is displayed beside the channel number on the screen. Then follow the steps 2 to 6 above to perform AUTO SET UP.

To preview the main functions (DEMO)

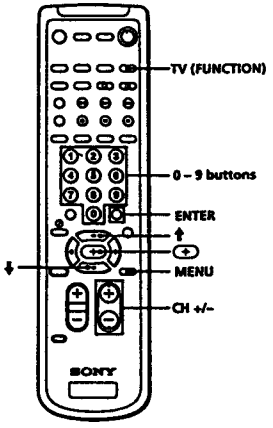
Press TV/VIDEO on the projection TV in step 4. The functions and menus are displayed one by one.

To exit DEMO

Press any button.

Erasing or adding channels

After AUTO SET UP, you can erase unnecessary channels or add the channels you want. Preset channels during the day rather than late at night, when some channels may not be broadcasting.



1 Press TV (FUNCTION).

2 Press MENU.

The main menu appears.

3 Press ↑ or ↓ to select 🖴, and press ⊕.

The SET UP menu appears.

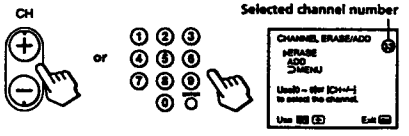
4 Press ↑ or ↓ to select CHANNEL ERASE/ADD, and press ⊕.

The CHANNEL ERASE/ADD menu appears.

5 Erase and/or add channels:

To erase an unwanted channel

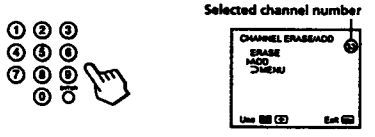
(1) Make sure the cursor (▶) is beside ERASE.
(2) Press CH +/– or the 0 – 9 buttons to select the channel you want to erase, and press ENTER.



(3) Press ⊕.
The "–" indication appears beside the channel number, showing that the channel is erased from the preset memory.

To add a channel that you want

(1) Press ↑ or ↓ to move the cursor (▶) to ADD.
(2) Press the 0 – 9 buttons to select the channel you want to add, and press ENTER.



(3) Press ⊕.
The "+" indication appears beside the channel number, showing that the channel is added to the preset memory.

6 To erase and/or add other channels, repeat step 5.

7 Press MENU to return to the original screen.

Notes

- If you erase or add a VHF or UHF channel, the cable TV channel with the same number is also erased or added, and vice versa.
- Erasing and adding channels is also available for the AUX input.

Adjusting convergence (CONVERGENCE)

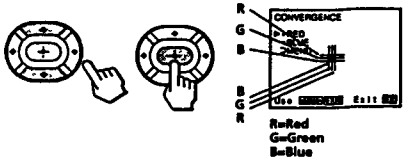
The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs. To correct this, adjust convergence.
You do not have to do this procedure if you perform AUTO SET UP (page 17). Do this procedure only when you want to adjust it manually.

1 Press MENU.

2 Press ↑ or ↓ to select 🖴, and press ⊕.

3 Press ↑ or ↓ to select CONVERGENCE, and press ⊕.

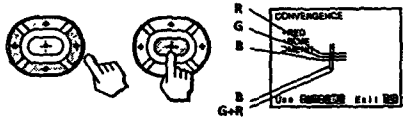
The CONVERGENCE adjustment screen appears.



4 Press ↑, ←, ↓, or → to move the cursor (▶) to the symbol showing the line you want to adjust, and press ⊕.

+RED: Red vertical and horizontal line (left/right/up/down adjustment)
+BLUE: Blue vertical and horizontal line (left/right/up/down adjustment)

5 Press ↑, ←, ↓, or → to move the line until it converges with the center green line, and press ⊕.



To move	Press
Up	↑
Down	↓
Right	→
Left	←

6 Repeat steps 4 and 5 to adjust the other lines until all three lines converge and are seen as a white cross.

7 Press MENU to return to the original screen.

Setting cable TV on or off

If you have connected the projection TV to a cable TV system, set CABLE to ON (the factory setting). If not, set CABLE to OFF.
You do not have to do this procedure if you perform AUTO SET UP (page 17). Do this procedure only when you want to set it manually.

1 Press MENU.

2 Press ↑ or ↓ to select 🧰, and press ⊕.

3 Set CABLE to ON or OFF:
(1) Press ↑ or ↓ to move the cursor (▶) to CABLE, and press ⊕.
(2) Press ↑ or ↓ to select ON or OFF, and press ⊕.

4 Press MENU to return to the original screen.

Note
- If CABLE appears in gray, the projection TV is set to a video input and you cannot select CABLE. Press TV (black button) so that a channel number appears.

Presetting channels

You can preset TV channels easily by using the AUTO PROGRAM feature.
You do not have to do this procedure if you perform AUTO SET UP (page 17). Do this procedure only when you want to set it manually.

1 Press MENU.

2 Press ↑ or ↓ to select 🧰, and press ⊕.

3 Press ↑ or ↓ to select AUTO PROGRAM, and press ⊕.

"AUTO PROGRAM" appears on the screen and the projection TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the lowest numbered channel is displayed.

4 Press MENU to return to the original screen.

To exit AUTO PROGRAM
Press any button.

Notes
- If the AUTO PROGRAM menu appears in gray, the projection TV is set to a video input and you cannot select AUTO PROGRAM. Press TV (black button) so that a channel number appears.
- Presetting channels is also available for the AUX input.

Changing the menu language

If you prefer Spanish or French to English, you can change the menu language.
You do not have to do this procedure if you select the language during AUTO SET UP (page 17).
Do this procedure only when you want to set it manually.

1 Press MENU.

2 Press ↑ or ↓ to select 🧰, and press ⊕.

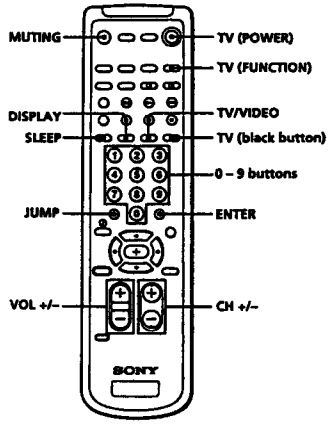
3 Press ↑ or ↓ to select LANGUAGE, and press ⊕.

4 Press ↑ or ↓ to select your favorite language, "ENGLISH", "ESPAÑOL," or "FRANÇAIS" and press ⊕.

5 Press MENU to return to the original screen.

Note
- Certain parts of the Spanish or French menus remain in English.

Watching the TV



1 Press TV (POWER) to turn on the projection TV.
The TIMER/STANDBY indicator flashes until the picture appears.

If "VIDEO" appears on the screen, press TV (black button) so that a channel number appears.

2 Press TV (FUNCTION).

Once you press TV (FUNCTION), the projection TV function is set unless another function button is pressed.

3 Select the channel you want:
To select a channel directly
Press the 0 – 9 buttons, and press ENTER.
For example, to select channel 10, press 1, 0 and ENTER.

To scan through channels
Press CH +/– until the channel you want appears.

The channel can also be selected without pressing ENTER.

4 Press VOL +/– to adjust the volume.

Switching quickly between two channels

You can use the JUMP button to switch or "jump" back and forth between two channels.

Press JUMP.

Pressing JUMP again switches the channel back to the one you selected last.

Note
- You cannot jump to channels you scanned through using the CH +/– buttons.

Muting the sound

Press MUTING.
"MUTING" appears on the screen.

To restore the sound, press MUTING again, or press VOL +.

Displaying on-screen information

Press DISPLAY repeatedly until the desired display appears.
Each time you press DISPLAY, the display changes as follows:

Status display* → XDS ON** → CC 1 ON*** → DISPLAY OFF →

* Channel number, the current time, channel caption (if set), and MTS mode (if SAP is selected) are displayed. SAP indication disappears after three seconds.
** Some programs are broadcast with XDS (Extended Data Service) which shows a network name, program name, program type, program length, call letters, and time of the show. When you select XDS with the DISPLAY button, this information will be displayed on the screen if the broadcaster offers this service.
*** Some programs are broadcast with Caption Vision. When you select Caption Vision with the DISPLAY button, Caption Vision will be displayed on the screen if the broadcaster offers this service. (See page 38 for selecting Caption Vision.)

To cancel the display, press DISPLAY repeatedly until "DISPLAY OFF" appears. "DISPLAY OFF" goes off after three seconds.

Setting the Sleep Timer

The projection TV stays on for the length of time you specify and then shuts off automatically.

Press SLEEP repeatedly until the time (minutes) you want appears.
Each time you press SLEEP, the time changes as follows:
30 → 60 → 90 → SLEEP OFF →

To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP OFF" appears, or turn off the projection TV.

Watching a video input picture

Press TV/VIDEO repeatedly until the desired video input appears.
Each time you press TV/VIDEO, the display changes as follows:

TV → VIDEO 1 → VIDEO 2 → VIDEO 3 →

To return to the TV picture, press TV (black button) so that a channel number appears.

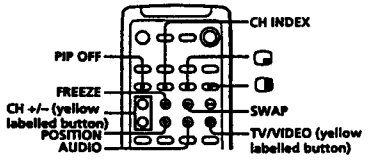
Changing the VHF/UHF input to the AUX input

Press TV (black button).
"AUX" appears beside the channel number.

Pressing TV (black button) again switches back to the VHF/UHF input.

Watching two programs at one time — PIP/P&P (Twin View™)/CH INDEX

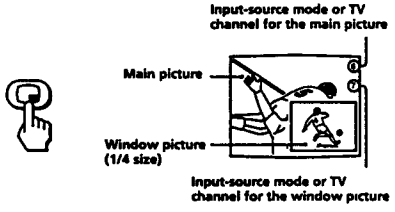
You can watch both the main/right picture and a window/left picture simultaneously using the Picture-in-Picture (PIP) or the Picture-and-Picture (Twin View™) feature.



Use the yellow labelled buttons for PIP operations.

Displaying a window picture (PIP)

Press ◪.

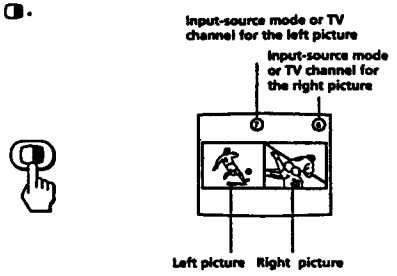

Input-source mode or TV channel for the main picture
Main picture
Window picture (1/4 size)
Input-source mode or TV channel for the window picture

Press ◪ repeatedly to display a smaller window picture.
Each time you press ◪, the size of the window picture changes as follows: 1/4 size → 1/9 size → 1/16 size.

To remove the window picture, press PIP OFF.

Displaying a left picture (P&P)

Press ◨.

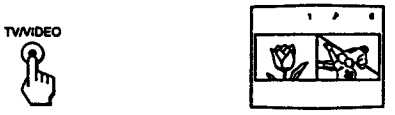

Input-source mode or TV channel for the left picture
Input-source mode or TV channel for the right picture
Left picture
Right picture

To restore the normal picture, press PIP OFF.

Notes
- If the main/right picture is not receiving an image, the window/left picture may become a noisy picture.
- The window/left picture sound is also output from the AUDIO (VAR/FIX) OUT jacks when you listen to it.

Changing the window/left picture input mode

Press TV/VIDEO (yellow labelled button) in PIP or P&P mode to select the input mode.
Each time you press TV/VIDEO (yellow labelled button), "TV," "VIDEO 1," "VIDEO 2," and "VIDEO 3" appear in sequence.

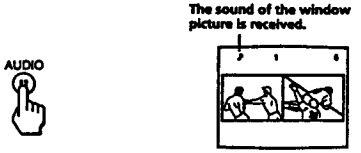


A window/left picture will appear in the same input mode as the last time you used PIP.

Note
- If you connect your VCR without a cable box, your PIP input source is a VCR. If you connect your VCR with a cable box, your PIP input source is a VCR or cable box.

Listening to the sound of the window/left picture

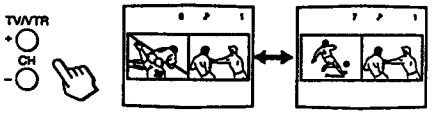
Press AUDIO in PIP or P&P mode.
The ♪ display appears above the window/left picture for a few seconds, indicating that the window/left picture sound is being received.



To restore the main picture sound, press AUDIO again. The ♪ display moves to the main picture channel number.

Changing TV channels in the window/left picture

Press CH +/– (yellow labelled button) in PIP or P&P mode.

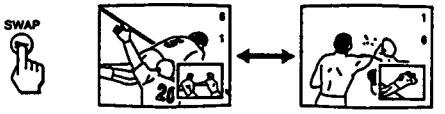


Changing the position of the window picture

Press POSITION in PIP mode.
Each time you press POSITION, the window picture will move counterclockwise on the screen.

Swapping the main/right and window/left pictures

Press SWAP in PIP or P&P mode.
Each time you press SWAP, the images and sound from the main/right and window/left pictures switch places with another.



Note
- The channels being received through the AUX connector cannot be displayed as a window picture.

Watching multiple TV channels at one time (CH INDEX)

You can display all the preset channels in sequence.

1 Press CH INDEX.
The main picture is displayed in the center with a pink frame and 12 window pictures are displayed around the main picture

Each time you press the CH IDEX button, the 12 window pictures will notate and a new picture will appear.

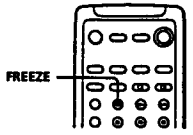
2 Press ↑, ←, ↓ or → to move the pink frame to the channel you want to watch, and press ⊕.
The selected channel appears on the screen.

To display eight favorite channels, press ⊕.

To return to the normal picture, press PIP OFF.

Freezing the picture (FREEZE)

The FREEZE feature is useful when you want to write down an information such as a recipe from a cooking program, a displayed address, or a phone number.



Press FREEZE.

The frozen picture differs depending on the current display mode.

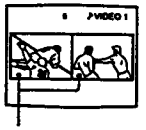
Normal mode

The current picture freezes.

PIP mode

The main picture freezes and the window picture disappears.

P&P mode



Both pictures freeze.

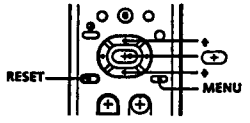
CH INDEX mode

Only the main picture freezes.

To cancel the frozen picture, press FREEZE again.

Adjusting the picture (VIDEO)

When watching TV programs, you can adjust the picture to suit your taste.
You can adjust the picture of video input(s) as well.



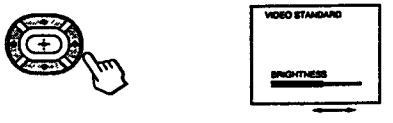
1 Press MENU.

2 Press ↑ or ↓ to select ⊞, and press ⊕.

3 Select the item you want to adjust.
For example:
(1) To adjust the brightness, press ↑ or ↓ to move the cursor (▶) to BRIGHTNESS.

(2) Press ⊕.

4 Adjust the selected item:
(1) Press ↑, →, ↓, or ← to adjust the item.



(2) Press ⊕.
The new setting appears in the VIDEO menu.

For details on each item, see "Description of adjustable items" below.

5 To adjust other items, repeat steps 3 and 4.

6 Press MENU to return to the original screen.

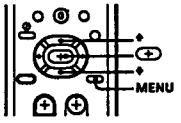
Description of adjustable items

Item	Press ← or → to	Press ↑ or ↓ to
PICTURE	Decrease picture contrast and give soft color.	Increase picture contrast and give vivid color.
HUE	Make picture tones become purplish.	Make picture tones become greenish.
COLOR	Decrease color intensity.	Increase color intensity.
BRIGHTNESS	Darken the picture.	Brighten the picture.
SHARPNESS	Soften the picture.	Sharpen the picture.

To restore the factory settings
Press RESET after displaying and selecting the VIDEO menu.
All of the settings are restored to the factory settings.

Adjusting the color temperature (TRINITONE)

The TRINITONE feature controls the color temperature, permitting white balance preference adjustment without affecting skin tones.



1 Press MENU.

2 Press ↑ or ↓ to select ⊞ and press ⊕.

3 Press ↑ or ↓ to select TRINITONE and press ⊕.

4 Press ↑ or ↓ to select NTSC STD, MEDIUM, or HIGH and press ⊕.

Choose	To
HIGH	a cool (bluish) white.
MEDIUM	a neutral white.
NTSC STD	a warm (reddish) white.

Selecting the video mode (VIDEO)

The video mode feature allows you to choose three different modes of picture settings. Choose the one that best suits the type of program that you want to watch.

1 **Press MENU.**

2 **Press ↑ or ↓ to select 🎬, and press ⊕.**

3 **Press ↑ or ↓ to select MODE, and press ⊕.**

4 **Press ↑ or ↓ to select STANDARD, MOVIE, or SPORTS mode, and press ⊕.**

Choose	To
STANDARD	Receive a standard picture.
MOVIE	Receive a finely detailed picture.
SPORTS	Receive a vivid, bright picture.

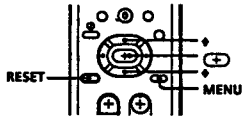
5 **Press MENU to return to the original screen.**

Note

- The settings for these modes can be adjusted in the VIDEO menu.

Adjusting the sound (AUDIO)

You can adjust the quality of the TV sound to suit your taste. You can adjust the sound of the video input(s) as well.

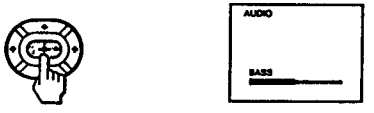


1 **Press MENU.**

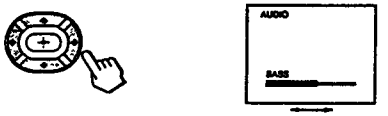
2 **Press ↑ or ↓ to select ♪, and press ⊕.**

3 **Select the item you want to adjust.**
For example:
(1) To adjust bass, press ↑ or ↓ to move the cursor (▶) to BASS.

(2) Press ⊕.



4 **Adjust the selected item:**
(1) Press ↑, ←, ↓, or → to adjust the item.



(2) Press ⊕.
The new setting appears in the AUDIO menu.

For details on each item, see "Description of adjustable items" below.

5 **To adjust other items, repeat steps 3 and 4.**

6 **Press MENU to return to the original screen.**

Description of adjustable items

Item	Press ↑ or ← to	Press ↓ or → to
TREBLE	Decrease the treble response.	Increase the treble response.
BASS	Decrease the bass response.	Increase the bass response.
BALANCE	Emphasize the left speaker's volume.	Emphasize the right speaker's volume.

To restore the factory settings

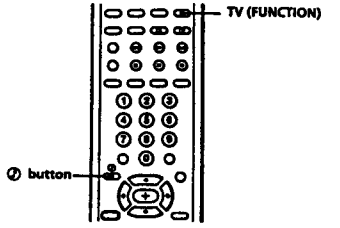
Press RESET after displaying and selecting the AUDIO menu.
All of the settings are restored to the factory settings.

Note

- When SPEAKER (page 31) is OFF and AUDIO OUT (page 32) is in the FIXED condition, the volume, TREBLE, BASS, and BALANCE cannot be adjusted.

Using audio effect (EFFECT)

Using the ⓩ (audio effect) button



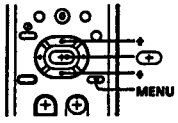
1 **Press TV (FUNCTION).**

2 **Press ⓩ.**
Each time you press the ⓩ button, the display changes as follows:

SRS → SIMULATED → EFFECT OFF

Choose	To
SRS	When the program's audio signal is stereo or encoded, SRS expands the material and embraces you with dynamic three-dimensional sound.
SIMULATED	Recieve monaural sound with a surrond-like effect.
EFFECT OFF	Cancel audio effect.

Using the menu to set audio effect



1 **Press MENU.**

2 **Press ↑ or ↓ to select ♪, and press ⊕.**

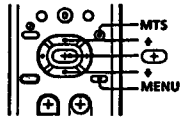
3 **Press ↑ or ↓ to select EFFECT, and press ⊕.**

4 **Press ↑ or ↓ to select SRS, SIMULATED or OFF, and press ⊕.**

5 **Press MENU to return to the original screen.**

Selecting stereo or bilingual programs (MTS)

The Multichannel TV Sound (MTS) feature allows you to enjoy stereo sound or Second Audio Programs (SAP) of your choice. The initial setting is stereo sound (STEREO).



Press MTS repeatedly to select STEREO, SAP, or MONO.

STEREO→SAP→MONO

Choose	To
STEREO	Listen to stereo sound. The STEREO indicator on the projection TV lights up when a stereo broadcast is received.
SAP	Listen to bilingual programs. There is no sound when the SAP signal is not broadcasting.
MONO	Listen to monaural sound. Reduce noise during stereo broadcasts.

Note

- Stereo and SAP sounds are subject to program sources.

To set MTS using the menu

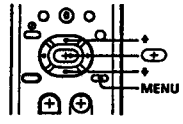
1 Press MENU.
2 Press ↑ or ↓ to select ♪, and press ⊕.
3 Press ↑ or ↓ to select MTS, and press ⊕.
4 Press ↑ or ↓ to select STEREO, SAP, or MONO.
5 Press MENU to return to the original screen.

Setting the speaker switch (SPEAKER)

You may switch off the projection TV speakers when, for example, you want to listen to the sound through a stereo system.

If you connect an amplifier with Dolby Pro Logic decoder to the CENTER SPEAKER IN terminals, you can use the projection TV speakers as center speaker. After making the connection (page 12), set SPEAKER to CENTER.

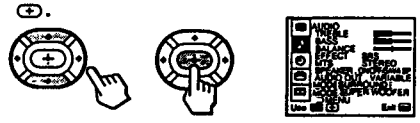
If you connect the Sony SAVA series speaker system to the AUDIO (VAR/FIX) OUT connectors, you can take advantage of the speakers' surround sound and super woofer mode. After making the connections (page 13), set SPEAKER to SAVA SP, then adjust SURROUND MODE or SUPER WOOFER MODE.



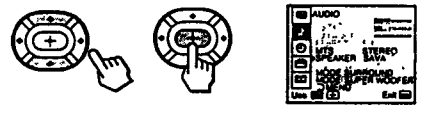
1 **Press MENU.**

2 **Press ↑ or ↓ to select ♪, and press ⊕.**

3 **Press ↑ or ↓ to select SPEAKER, and press ⊕.**



4 **Press ↑ or ↓ to select ON, OFF, CENTER or SAVA SP, and press ⊕.**



5 **Press MENU to return to the original screen.**

Choose	To
ON	Listen to the sound from the projection TV.
OFF	Turn off the projection TV speaker sound and listen to the projection TV's sound solely through the audio system speakers.
CENTER	Use the projection TV center speakers as the center speaker in another surround audio system.
SAVA SP	Turn off the projection TV speaker sound and listen to the projection TV's sound through the Sony SAVA series speaker system. You can adjust volume, muting, surround modes, and super woofer mode with the remote control supplied with the projection TV.

To select surround sound or super woofer mode of the SAVA speaker system

After setting SPEAKER to SAVA SP, follow the procedure below.

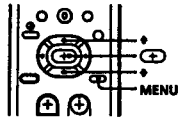
Press ↑ or ↓ to select SURROUND MODE or SUPER WOOFER MODE, and press ⊕.
For details on each option, refer to the operating instructions of the speaker system.

Note

- This feature is only for Sony SAVA speaker system with an operation capability for KP-48V45, KP-53V45, and KP-61V45.

Setting audio out (AUDIO OUT)

You can change AUDIO OUT to VARIABLE or FIXED when SPEAKER is set to OFF.
AUDIO OUT is variable when SPEAKER is set to ON.

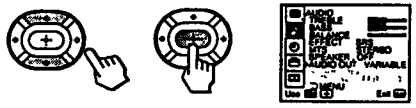


1 **Press MENU.**

2 **Press ↑ or ↓ to select ♪, and press ⊕.**

3 **Press ↑ or ↓ to select AUDIO OUT, and press ⊕.**

4 **Press ↑ or ↓ to select VARIABLE or FIXED, and press ⊕.**



VARIABLE: Sound output varied according to the projection TV settings. You can adjust the volume, bass, treble, and balance.
FIXED: Sound output is always fixed to a certain level. The volume, bass, treble, and balance are also fixed to the factory settings.

5 **Press MENU to return to the original screen.**

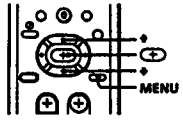
Note
- If AUDIO OUT appears in gray, set SPEAKER to OFF.

Setting daylight saving time (DAYLIGHT SAVING)

If your area uses daylight saving time, change DAYLIGHT SAVING setting depending on the season, before setting the current time.

Daylight saving start
- After the first Sunday in April, set DAYLIGHT SAVING to YES. Current time setting (right column) automatically moves one hour ahead.

Daylight saving end
- After the last Sunday in October, set DAYLIGHT SAVING to NO. Current time setting automatically moves one hour back.



1 **Press MENU.**

2 **Press ↑ or ↓ to select ⏲, and press ⊕.**

3 **Press ↑ or ↓ to select DAYLIGHT SAVING, and press ⊕.**

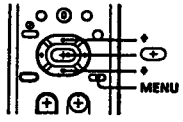
4 **Press ↑ or ↓ to select YES or NO, and press ⊕.**

Choose	To
YES	Set for daylight saving start.
NO	Set for daylight saving end.

5 **Press MENU to return to the original screen.**

Setting the clock (CURRENT TIME SET)

Setting the clock enables you to turn the projection TV on and off with the timer. Make sure to set daylight saving time first.



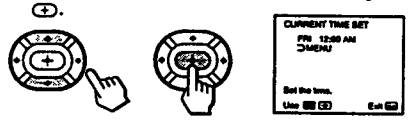
1 **Press MENU.**

2 **Press ↑ or ↓ to select ⊙, and press ⊕.**

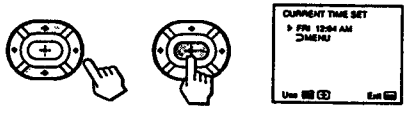
3 **Press ↑ or ↓ to select CURRENT TIME SET, and press ⊕.**

4 **Make sure the cursor (▶) is to the left of "–:– AM," and press ⊕.**

5 **Set the current day of the week and time.**
(1) Press ↑ or ↓ to set the day of the week, and press ⊕.



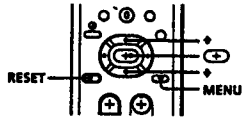
(2) Set the hour and minutes in the same way as in step (1). When you press ⊕ after setting the minutes, the clock starts.



6 **Press MENU to return to the original screen.**

Setting the timer to turn the projection TV on and off (ON/OFF TIMER)

You can set the projection TV to turn on and off at the times you specify. Make sure the clock is set correctly. If it is not, set the clock first (left column).



1 **Press MENU.**

2 **Press ↑ or ↓ to select ⏲, and press ⊕.**

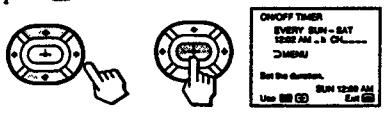
3 **Press ↑ or ↓ to select ON/OFF TIMER, and press ⊕.**

4 **Press ⊕ and enter the ON/OFF TIMER setting.**
(1) Press ↑ or ↓ to set the day(s), and press ⊕.

Each time you press ↑ or ↓, the days cycle as follows:
EVERY SUN–SAT→EVERY MON–FRI→SUNDAY→...→SATURDAY→EVERY SUNDAY→...→EVERY SATURDAY

(continued)

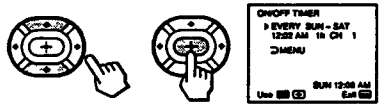
(2) Press ↑ or ↓ to set the time (hour then minutes) that you want to turn on the projection TV, and press ⊕.



(3) Press ↑ or ↓ to set the time duration, and press ⊕.

Each time you press ↑, the time duration increases by one hour up to a maximum of six hours.

(4) Press ↑ or ↓ to select the channel, and press ⊕.



The TIMER indicator on the projection TV lights up.

5 To set the other program, press ⊕, and repeat step 4.

6 Press MENU to return to the original screen.

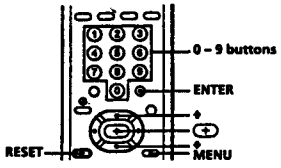
One minute before the projection TV turns off, the message "TV will turn off soon." is displayed on the screen.

To cancel the timer
In step 3 or 4, press RESET.

Note
- If you unplug the projection TV or a power interruption occurs, the ON/OFF TIMER setting will be erased. Reset the current time, then set the timer.

Customizing the channel names (CHANNEL CAPTION)

You can add a caption for up to 12 channels. This feature allows you to easily identify which channel you are watching. You can make your own caption.



1 Press MENU.

2 Press ↑ or ↓ to select 🧰, and press ⊕.

3 Press ↑ or ↓ to select CHANNEL CAPTION, and press ⊕.

4 Press ⊕ and press ↑ or ↓ to select the channel that you want to caption, and press ⊕.

5 Enter the letters (up to four) to caption the channel:
(1) Press ↑ or ↓ to select the first letter.

Each time you press ↑ or ↓, the letter changes as follows:

0...9→A...Z→&./_(blank space)

(2) Press ⊕.

(3) Repeat steps (1) and (2) to select the remaining letters, and press ⊕.

6 Repeat steps 4 and 5 to caption other channels.

7 Press MENU to return to the original screen.

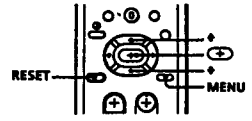
After you customize the channel, the channel caption appears green.

To erase a caption
In step 5, press RESET.

Notes
- If the CHANNEL CAPTION menu appears in gray, the projection TV is set to a video input, and you cannot select CHANNEL CAPTION. Press TV (black button) so that a channel number appears.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- The channel caption feature is not available for the AUX input

Blocking out a channel (CHANNEL BLOCK)

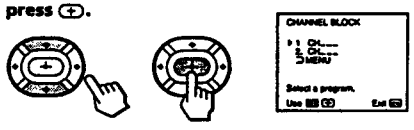
The channel block feature allows you to prevent children from watching unsuitable programs. You can block out two channels.



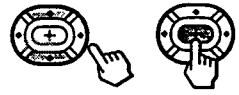
1 Press MENU.

2 Press ↑ or ↓ to select 🧰, and press ⊕.

3 Press ↑ or ↓ to select CHANNEL BLOCK, and press ⊕.

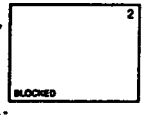


4 Press ↑ or ↓ to select program 1 or 2, and press ⊕.



5 Press ↑ or ↓ to select the channel which you want to block out, and press ⊕.

6 Press MENU to return to the original screen.
When you select the blocked channel, the message "BLOCKED" appears on the screen.



To cancel a CHANNEL BLOCK setting
In step 4 or 5, press RESET.

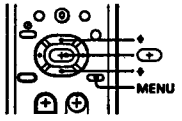
Note
- Once you use CHANNEL BLOCK, Caption Vision and XDS of the blocked channel and the selected channel output from MONITOR OUT are also blocked out.

Setting your favorite channels

(FAVORITE CHANNEL)

The favorite channel feature allows your projection TV to memorize your favorite channels easily.
If you set to AUTO, the last eight channels you selected with the 0 – 9 buttons are automatically set as your favorite channels. If you want to input your own selection of channels, set to MANUAL.

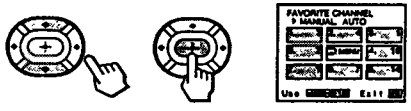
Setting your favorite channels



1 Press MENU.

2 Press ↑ or ↓ to select 🧰, and press ⊕.

3 Press ↑ or ↓ to select FAVORITE CHANNEL, and press ⊕.



4 Press ⊕ and press ← or → to select AUTO or MANUAL, and press ⊕.

If you select AUTO, skip steps 5 to 7.
The last eight channels you selected with the 0 – 9 buttons are automatically set as your favorite channels.

If you select MANUAL, the favorite channel numbers become white, indicating that favorite channels can be entered.

5 Press ↑, ←, ↓ or → to select a favorite channel number, and press ⊕.

6 Press ↑ or ↓ to select the channel that you want to set as your favorite channel, and press ⊕.

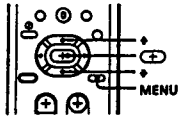
7 To set the other favorite channels, repeat steps 5 and 6.

8 Press MENU to return to the original screen.

Notes

- If more than 90 seconds elapse after you press another button, the menu disappears automatically.
- The favorite channel feature is not available for the AUX input.

Selecting your favorite channel



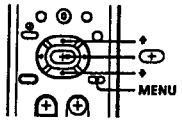
1 Press ⊕.
The picture of the current channel is displayed in the center with a pink frame and the eight favorite channels are displayed around it.

2 Press ↑, ←, ↓ or → to move the pink frame to the channel you want to watch, and press ⊕.
The selected channel appears on the screen.

Setting video labels

(VIDEO LABEL)

The video label feature allows you to label each input mode so that you can easily identify the connected equipment. For example, you can label VIDEO 1 as VHS.



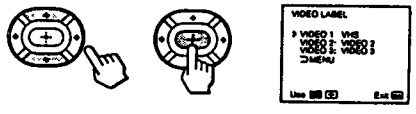
1 Press MENU.

2 Press ↑ or ↓ to select 🧰, and press ⊕.

3 Press ↑ or ↓ to select VIDEO LABEL, and press ⊕.

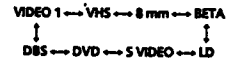
4 Press ↑ or ↓ to select the input mode you want to label, and press ⊕.

5 Press ↑ or ↓ to select the label, and press ⊕.

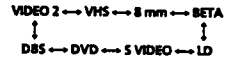


Each time you press ↑ or ↓, the label changes as follows:

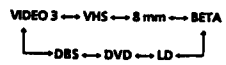
VIDEO 1



VIDEO 2



VIDEO 3



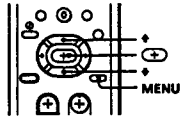
6 Repeat steps 4 and 5 to label other input modes.

Note

- If more than 90 seconds elapse before you press another button, the menu disappears automatically.

Setting Caption Vision (CAPTION VISION)

Some programs are broadcast with Caption Vision. To display Caption Vision, select either CC1, CC2, CC3, CC4, TEXT1, TEXT2, TEXT3, or TEXT4 from the menu. CC1, CC2, CC3, or CC4 shows you on-screen version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.) TEXT1, TEXT2, TEXT3, or TEXT4 shows you on-screen information presented using either half or the whole screen. It is not usually related to the program.



1 **Press MENU.**

2 **Press ↑ or ↓ to select CC, and press ⊕.**

3 **Press ↑ or ↓ to select the caption type, and press ⊕.**

4 **Press MENU to return to the original screen.**

To display Caption Vision
Press DISPLAY (See page 23 for details.)

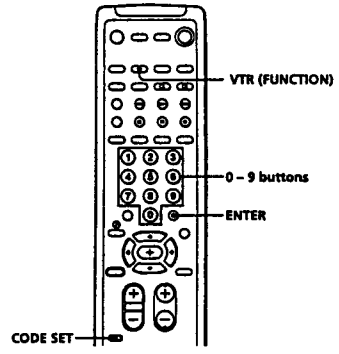
Notes

- Poor reception of TV programs can cause errors in Caption Vision and XDS.
  Captions may appear with a white box or other errors instead of a certain word.
- XDS, Caption Vision, and the status display cannot be used at the same time
- For details on XDS, see page 23.

Operating video equipment

You can use the supplied remote control to operate Sony or non-Sony video equipment that has an infrared remote sensor. For this operation, set the manufacturer's code number.

Setting the manufacturer's code



Press the CODE SET, VTR (FUNCTION), and 0 – 9 buttons to enter the manufacturer's code number (see the chart on page 39), then press ENTER.
For example, to operate a Sony 8 mm VCR, press CODE SET, VTR (FUNCTION), 3, 0, 2, and ENTER.

VCR manufacturer code numbers

Manufacturer	Code number
Sony	301, 302, 303
Aiwa	338
Audio Dynamic	314, 337
Bell & Howell (M. Wards)	330, 343
Brocsonic	319
Canon	309, 308
Citizen	332
Craig	315, 302, 332
Curtis Mathis	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318
Fisher	330, 334, 335, 333
Funai	338
General Electric	329, 304, 309
Goldstar	332
Hitachi	306, 304, 305
Instant Replay	309, 308
JC Penny	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 333, 334, 330, 335
Magnavox	308, 309
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi/MGA	323, 324, 325, 326
Multitech	325, 338, 321
NEC	314, 336, 337
Olympic	309, 308
Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	308, 309
Pioneer	308
Quasar	308, 309
RCA/PROSCAN	304, 305, 308, 309, 311, 312, 313
Realistic	309, 330, 328, 335, 324, 338
Sansui	314
Singer	315
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323, 324, 325, 326
Sharp	327, 328
Shuntom	315
Signature 2000 (M. Wards)	338, 327
Sylvania	308, 309, 338
Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
Technics	309, 308
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
Yamaha	330, 314, 336, 337
Zenith	331

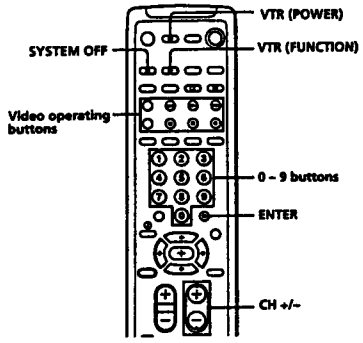
MDP manufacturer code numbers

Manufacturer	Code number
Sony	701
Kenwood	707
Magnavox	703
Maranz	702
Mitsubishi	702
Panasonic	704
Philips	703
Pioneer	702
RCA	702
Sanyo	706
Sharp	705
Yamaha	703

Notes

- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied remote control. This is because your equipment may use a code that is not included with this remote control. In this case, please use the equipment's own remote control unit.
- The code numbers for Sony equipment are assigned at the factory as follows:
  VHS VCR — 301 (preset code for the supplied remote control)
  8 mm VCR — 302
  Beta, ED Beta VCRs — 303
- Whenever you remove the batteries — to replace them, for example — if too much time is taken, the code number may revert to the factory setting and must be reset.

Operating video equipment



Use the video operating buttons on the remote control to operate the video equipment. Press VTR (FUNCTION) before operating the video equipment.

Operating a VCR	Buttons on the remote control
To turn on or off	Press VTR (POWER).
To select a channel directly	Press the 0 – 9 buttons.
To change channels	Press CH +/–.
To record	Press ► while pressing ● First release ►, then release ●.
To play	Press ►.
To stop	Press ■.
To fast forward	Press ►►.
To rewind the tape	Press ◄◄.
To pause	Press II. To resume normal playback, press again.
To search the picture forward or backward	Press ►► or ◄◄ during playback. To resume normal playback, release the button.
To change input mode	Press TV/VTR.

Operating an MDP	Buttons on the remote control
To turn on or off	Press VTR (POWER).
To play	Press ►.
To stop	Press ■.
To pause	Press II. To resume normal playback, press again.
To search the picture forward or backward	Keep pressing ►► or ◄◄ during playback. To resume normal playback, release the button.
To search the chapter forward and backward	Press CH +/–.

Operating an DVD	Buttons on the remote control
To turn on or off	Press VTR (POWER)
To play	Press ►
To stop	Press ■
To pause	Press II To resume normal playback, press again
To serch the picture forward or backward	Keep pressing ►► or ◄◄ during playback To resume normal playback, release the button

Note

- If the video equipment does not have a certain function, the corresponding button on this remote control will not operate

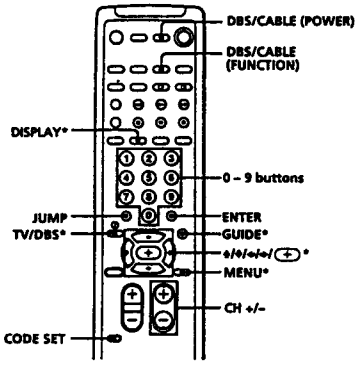
Turning off the system

You can turn off the projection TV and Sony equipment with the S-Link function, such as a VCR, together when you make the S-Link connection (see page 14 for the connection).

Press SYSTEM OFF.

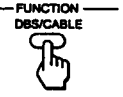
Operating a cable box or DBS receiver

You can program the supplied remote control to operate a cable box or DBS receiver. Follow the procedures below to set the manufacturer's code number in the remote control.

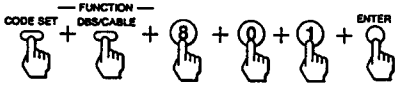


* The TV/DBS, GUIDE, DISPLAY, ↑/↓/←/→/⊕, and MENU buttons can be used only with a DBS receiver.

1 Turn off the equipment you want to set up, and press DBS/CABLE (FUNCTION).



2 Press the CODE SET, DBS/CABLE (FUNCTION), and 0 – 9 buttons to enter the manufacturer's code number (see the chart on the right column), then press ENTER. For example, to program your remote control to operate a Sony DBS receiver, press CODE SET, DBS/CABLE (FUNCTION), 8, 0, 1, and ENTER.



3 Press DBS/CABLE (POWER) to turn on the cable box or DBS receiver.

4 Use the cable box/DBS control buttons to check if the code number works.
For example, to operate a cable box or DBS receiver, you can use the DBS/CABLE (POWER), JUMP, CH +/–, 0 – 9 and ENTER buttons.

Note

- If the cable box or DBS receiver does not have a certain function, the corresponding button on this remote control will not operate.

To operate the projection TV

Press TV (FUNCTION). Then use the projection TV control buttons to control the projection TV.

For more details on operating the cable box or DBS receiver

Refer to the operating instructions that come with the equipment.

If the remote control doesn't work

- First, try repeating the setup procedures using the other codes listed for your equipment.

Manufacturer code numbers (cable box)

Manufacturer	Code number
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

Manufacturer code numbers (DBS receiver)

Manufacturer	Code number
Sony	801 (preset code for the supplied remote control)
RCA	802

Notes

- If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this remote control and you may not be able to operate your equipment with the supplied remote control. In this case, use the equipment's own remote control unit.
- Whenever you remove the batteries — to replace them, for example — if too much time is taken, the code numbers may revert to the factory setting and must be reset

Troubleshooting

If the problem persists after trying the methods below, contact your nearest Sony dealer.

No picture (screen not lit), no sound
- ➡ Make sure the power cord is connected securely.
- ➡ Operate with the buttons on the projection TV.
- ➡ Insert the batteries in the remote control with the correct polarity.
- ➡ Replace the batteries with new ones if they are weak.
- ➡ Check to see if the TV/VIDEO setting is correct: when watching TV, set to TV, and when watching video tapes, set to VIDEO1, 2, or 3.
- ➡ Try another channel. It could be station trouble.
- ➡ Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 17)

Poor or no picture (screen lit), good sound
- ➡ Adjust PICTURE in the VIDEO menu. (page 26)
- ➡ Adjust BRIGHTNESS in the VIDEO menu. (page 26)
- ➡ Adjust convergence. (page 19)
- ➡ Check antenna/cable connections. (page 6)
- ➡ Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 17)
- ➡ Remove objects from the front of the projection TV.

Good picture, no sound
- ➡ Press MUTING so that "MUTING" disappears from the screen. (page 22)
- ➡ Check the MTS setting in the AUDIO menu. (page 30)
- ➡ Make sure SPEAKER is set to ON in the AUDIO menu. (page 31)
- ➡ Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 17)

No color
- ➡ Adjust the COLOR in the VIDEO menu. (page 27)
- ➡ Confirm that black and white program is not being broadcast.
- ➡ Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 17)

Only snow and noise appear on the screen
- ➡ Check the CABLE setting in the SET UP menu. (page 20)
- ➡ Check the antenna/cable connections. (page 6)
- ➡ Make sure the channel is broadcasting programs.
- ➡ Press TV (black button) to change the input mode. (page 23)

Dotted lines or stripes
- ➡ Adjust the antenna.
- ➡ Move the projection TV away from noise sources such as cars, neon signs, and hair-dryers.

Double images or ghosts
- ➡ Use a highly directional outdoor antenna or a cable (when the problem is caused by reflections from nearby mountains or tall buildings).

Cannot operate menu
- ➡ If the item you want to choose appears in gray, you cannot select it. Press TV/VIDEO correctly.
- ➡ Check the CABLE setting in the SET UP menu. (page 20)

Cannot receive upper channels (UHF) when using an antenna
- ➡ Make sure CABLE is OFF in the SET UP menu. (page 20)
- ➡ Use AUTO PROGRAM to add receivable channels that are not presently in projection TV memory. (pages 17, 21)

Cannot receive any channels when using cable TV
- ➡ Make sure CABLE is ON in the SET UP menu. (page 20)
- ➡ Use AUTO PROGRAM to add receivable channels that are not presently in projection TV memory. (pages 17, 21)

Remote control does not operate
- ➡ Batteries could be weak. Replace the batteries. (page 16)
- ➡ Make sure the projection TV's power cord is connected securely to the wall outlet.
- ➡ Press TV (FUNCTION) when operating your projection TV.
- ➡ Are fluorescent lights too close to the projection TV? Move them at least 3-4 feet away from the projection TV.

Cannot gain enough volume when using a cable box
- ➡ Increase the volume at the cable box. Then press TV (FUNCTION) and adjust the projection TV's volume.

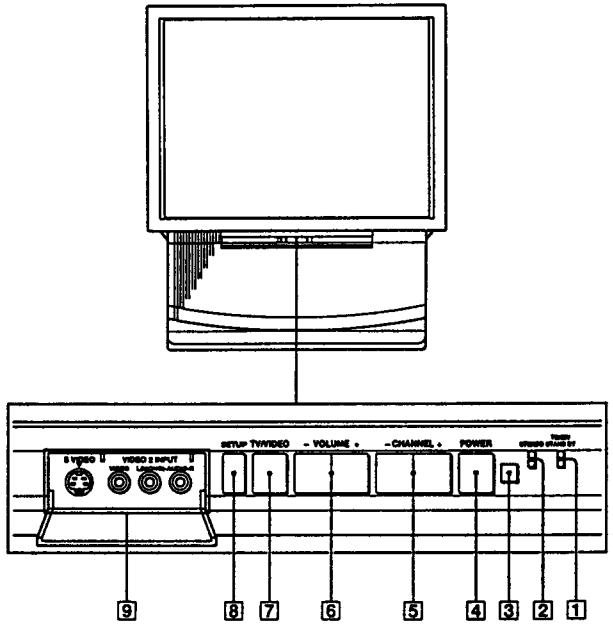
Projection TV malfunctions when using the S-Link function
- ➡ Make sure the projection TV's power cord is connected securely to the wall outlet.
- ➡ Check the S-Link connection. (page 14)

The projection TV needs to be cleaned
- ➡ Clean the projection TV with a soft dry cloth. Never use strong solvents such as thinner or benzine, which might damage the finish of the cabinet.

Index to parts and controls

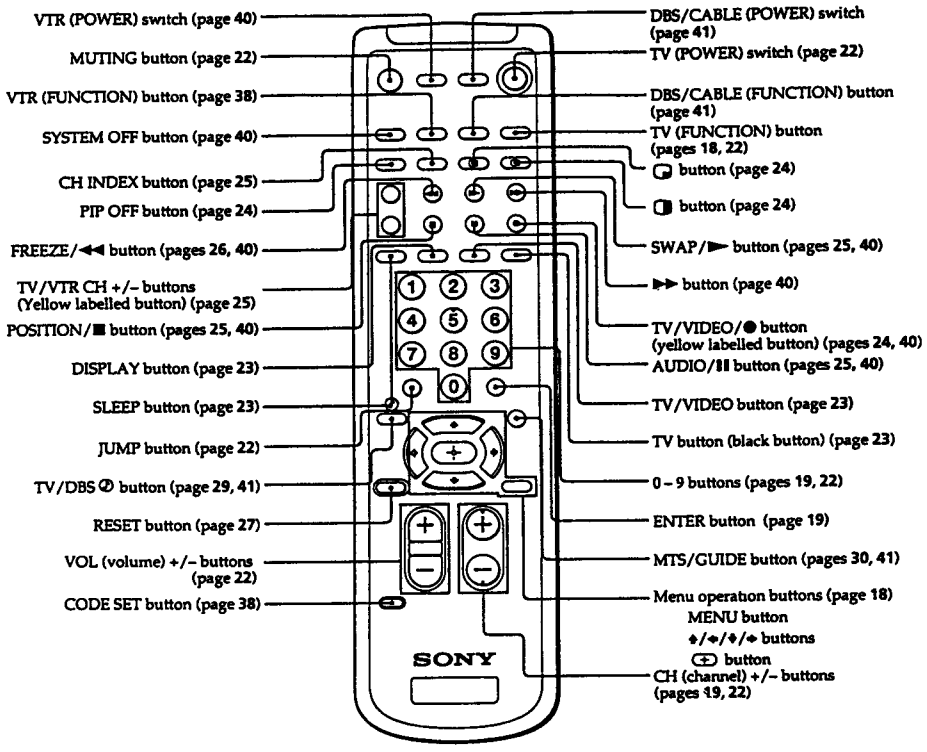
This section briefly describes the buttons and controls on the projection TV and on the remote control. For more information, refer to the pages next to each description.

Projection TV — Front



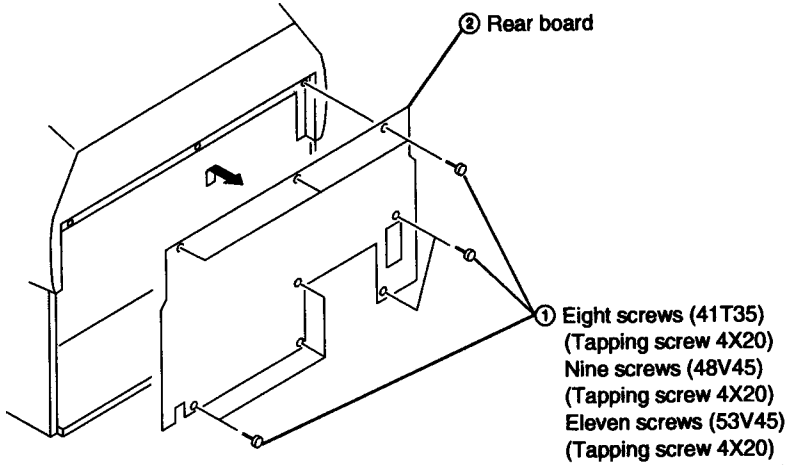
1. TIMER/STANDBY indicator (pages 22, 34)
2. STEREO indicator (page 30)
3. Remote sensor
4. POWER switch (page 17)
5. CHANNEL +/– buttons (page 17)
6. VOLUME +/– buttons (page 17)
7. TV/VIDEO button (page 17, 18)
8. SETUP button (page 17)
9. S VIDEO/VIDEO 2 INPUT (VIDEO/AUDIO L(MONO)/R) jacks (page 10)

Remote control

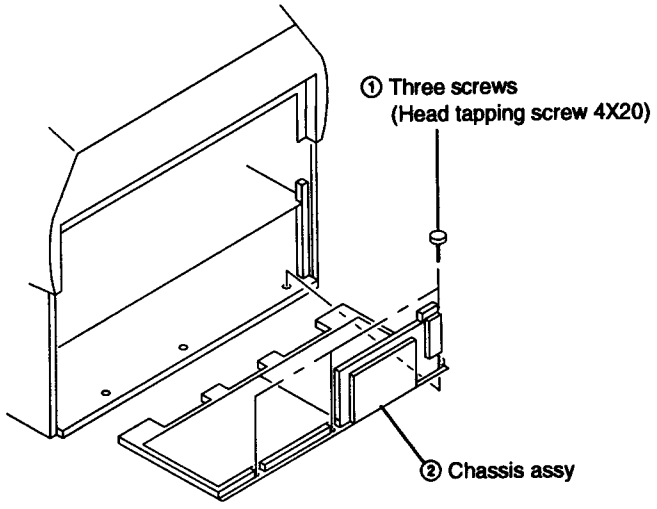

VTR (POWER) switch (page 40)
MUTING button (page 22)
VTR (FUNCTION) button (page 38)
SYSTEM OFF button (page 40)
CH INDEX button (page 25)
PIP OFF button (page 24)
FREEZE/◄◄ button (pages 26, 40)
TV/VTR CH +/– buttons (Yellow labelled button) (page 25)
POSITION/■ button (pages 25, 40)
DISPLAY button (page 23)
SLEEP button (page 23)
JUMP button (page 22)
TV/DBS button (page 29, 41)
RESET button (page 27)
VOL (volume) +/– buttons (page 22)
CODE SET button (page 38)
DBS/CABLE (POWER) switch (page 41)
TV (POWER) switch (page 22)
DBS/CABLE (FUNCTION) button (page 41)
TV (FUNCTION) button (pages 18, 22)
button (page 24)
button (page 24)
SWAP/► button (pages 25, 40)
►► button (page 40)
TV/VIDEO/● button (yellow labelled button) (pages 24, 40)
AUDIO/II button (pages 25, 40)
TV/VIDEO button (page 23)
TV button (black button) (page 23)
0 – 9 buttons (pages 19, 22)
ENTER button (page 19)
MTS/GUIDE button (pages 30, 41)
Menu operation buttons (page 18)
MENU button
♦/♦/♦/♦ buttons
⊕ button
CH (channel) +/– buttons (pages 19, 22)
SONY

SECTION 2
DISASSEMBLY

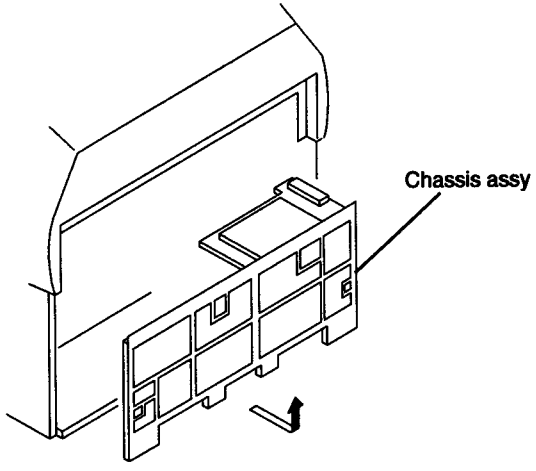
2-1. REAR BOARD REMOVAL



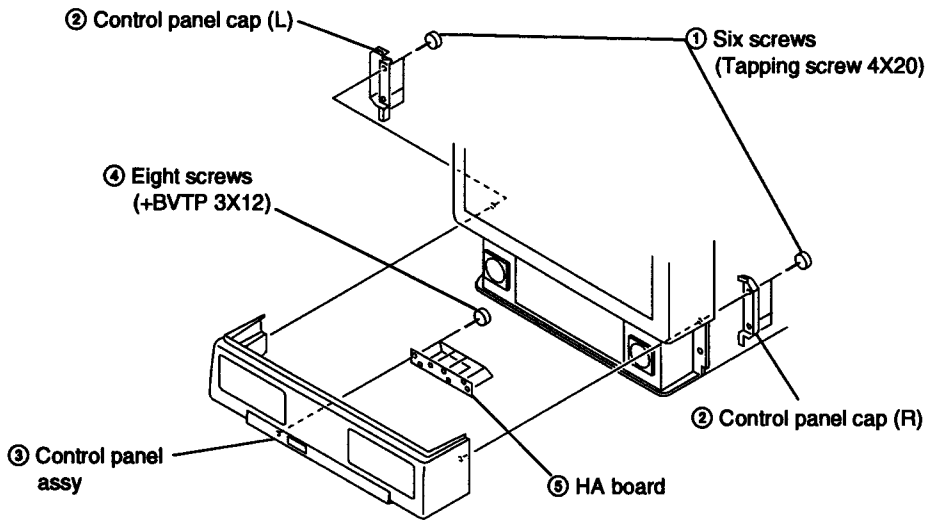
2-2. CHASSIS ASSY REMOVAL



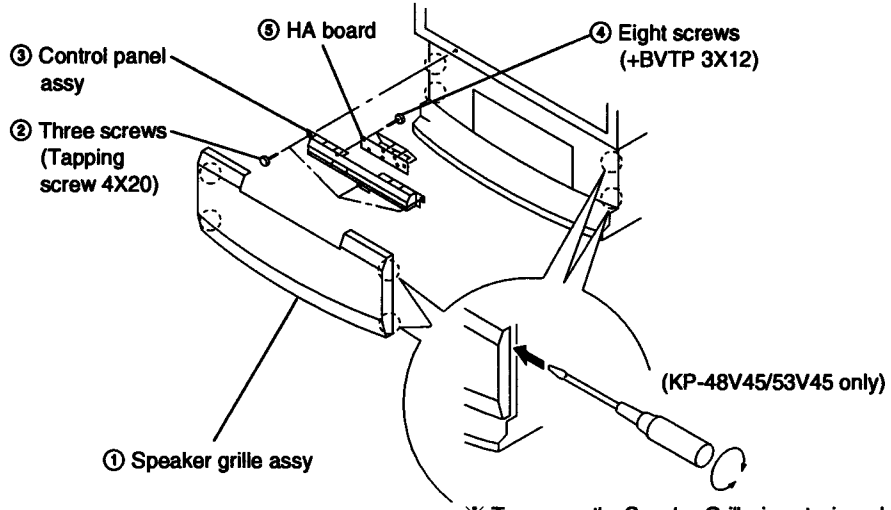
2-3. SERVICE POSITION



2-4-1. HA BOARD REMOVAL (KP-41T35)

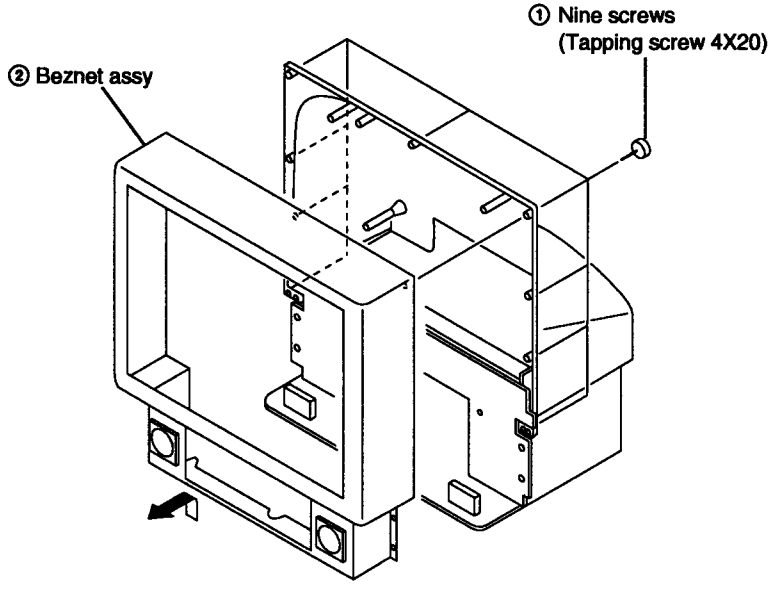

② Control panel cap (L)
① Six screws (Tapping screw 4X20)
④ Eight screws (+BVTP 3X12)
② Control panel cap (R)
③ Control panel assy
⑤ HA board

2-4-2. HA BOARD REMOVAL (KP-48V45/53V45/61V45)

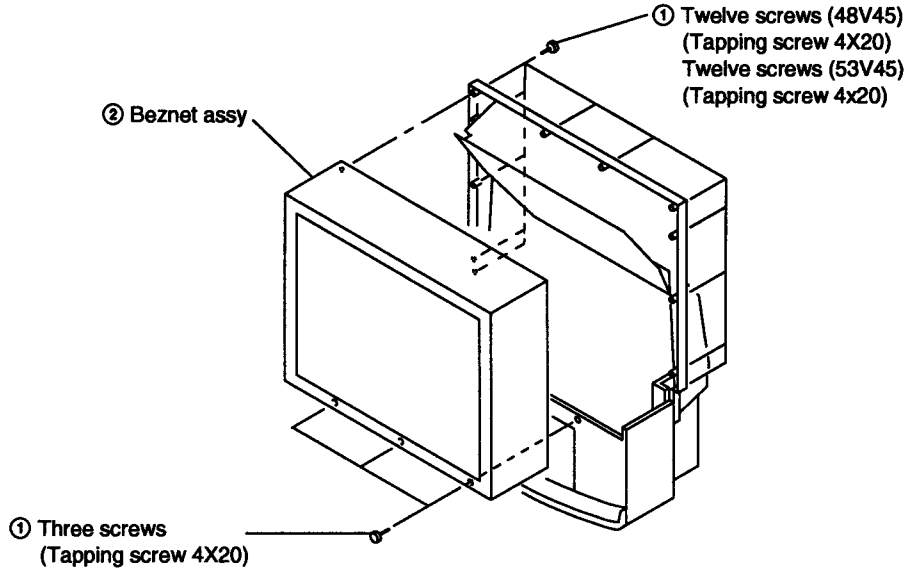

⑤ HA board
④ Eight screws (+BVTP 3X12)
③ Control panel assy
② Three screws (Tapping screw 4X20)
(KP-48V45/53V45 only)
① Speaker grille assy

※ To remove the Speaker Grille, insert minus driver into an narrow opening between the cabinet and the Speaker Grille, and rotate the driver. Do this on the four corners indicated with circles.

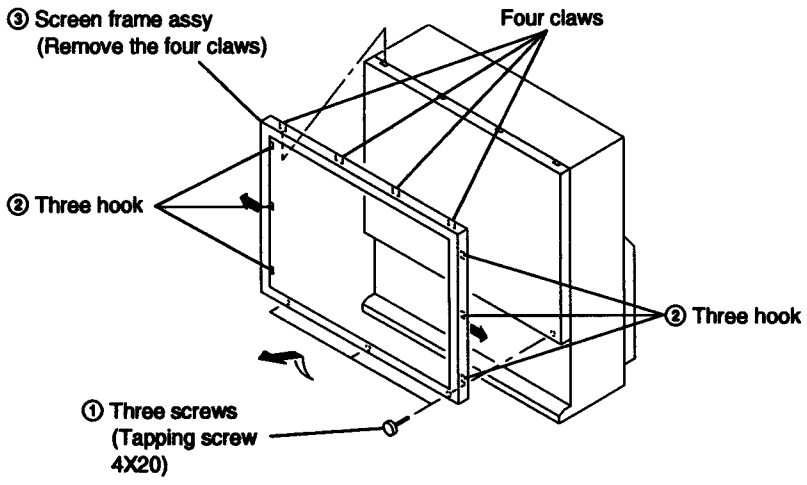
2-5-1. BEZNET ASSY REMOVAL (KP-41T35)



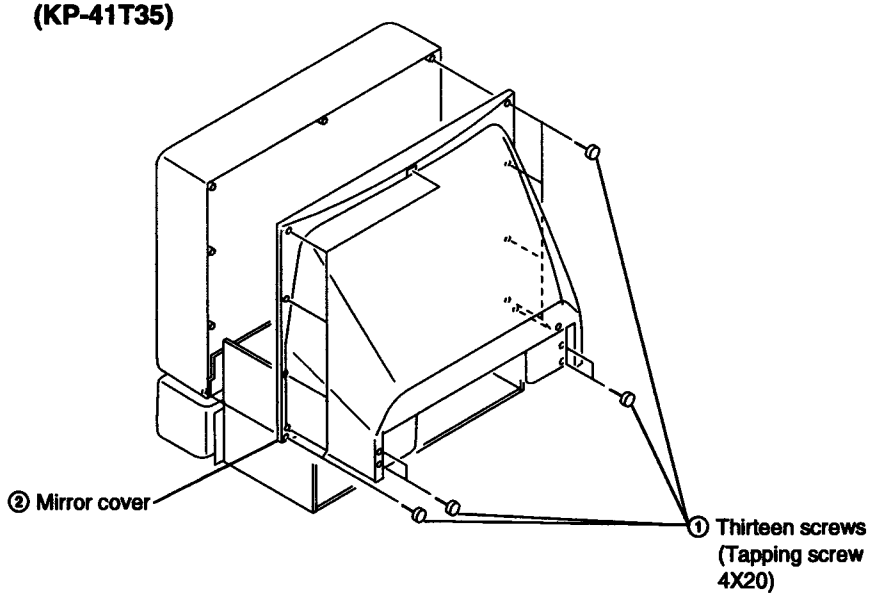
2-5-2. BEZNET ASSY REMOVAL (KP-48V45/53V45)


① Twelve screws (48V45) (Tapping screw 4X20) Twelve screws (53V45) (Tapping screw 4x20)
② Beznet assy
① Three screws (Tapping screw 4X20)

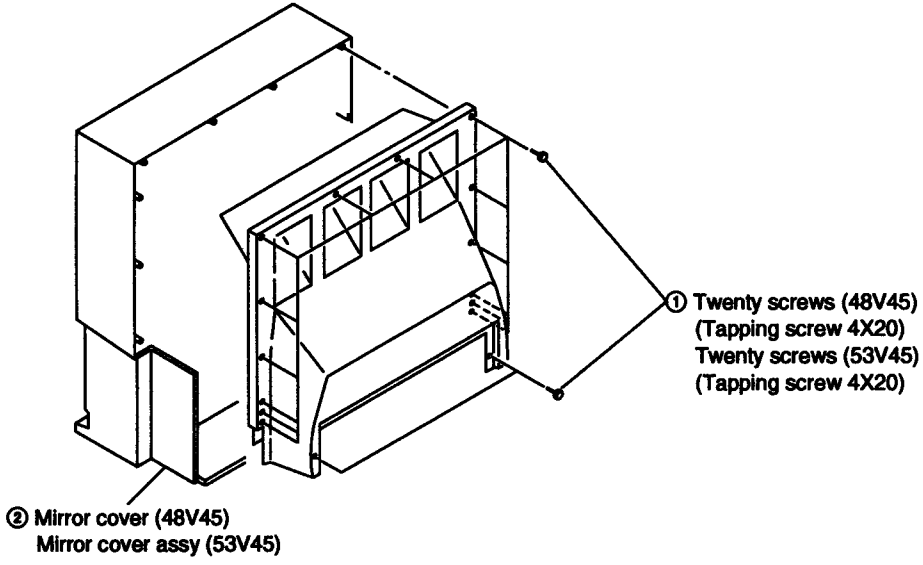
2-5-3. SCREEN FRAME ASSY REMOVAL (KP-61V45)



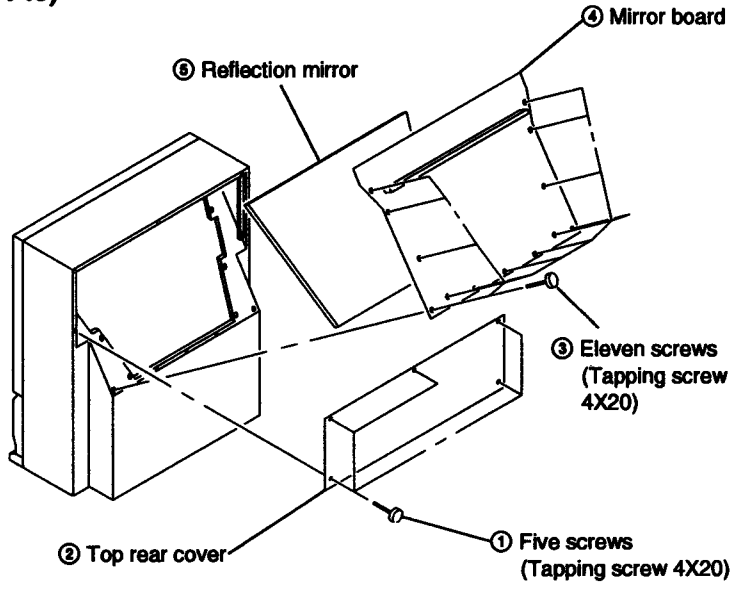
2-6-1. MIRROR COVER ASSY REMOVAL (KP-41T35)



2-6-2. MIRROR COVER ASSY REMOVAL (KP-48V45/53V45)

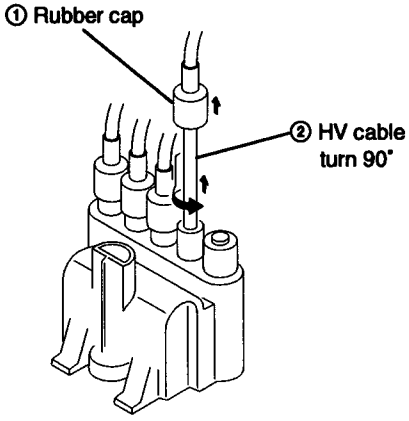


2-6-3. REFLECTION MIRROR REMOVAL (KP-61V45)

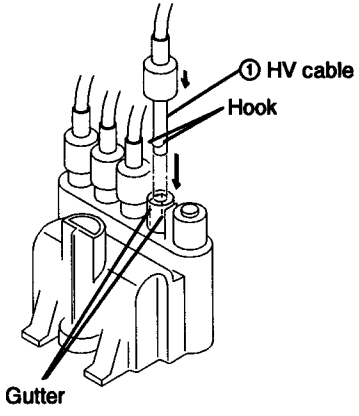


2-7. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL

(1) Remover

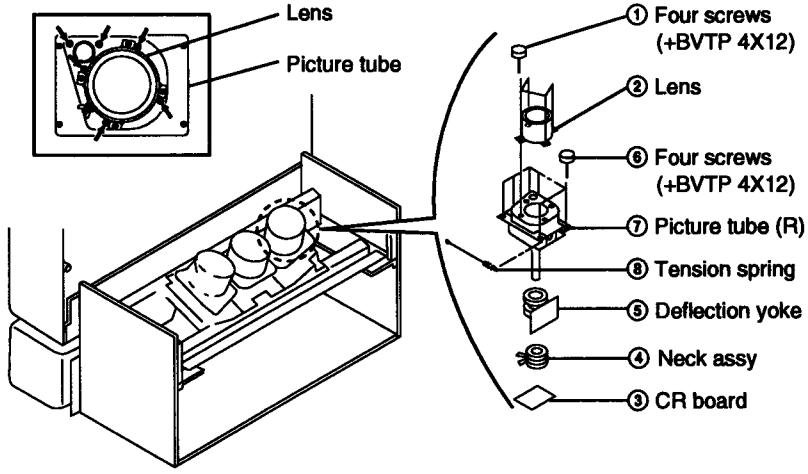


(2) Installation



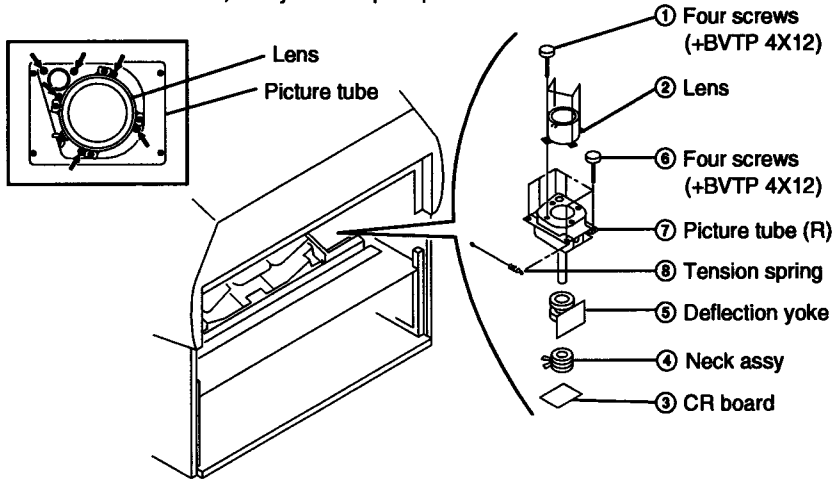
2-8-1. PICTURE TUBE REMOVAL (KP-41T35)

CAUTION: Removing the arrow-marked screws is strictly prohibited.
If removed, it may cause liquid spill.



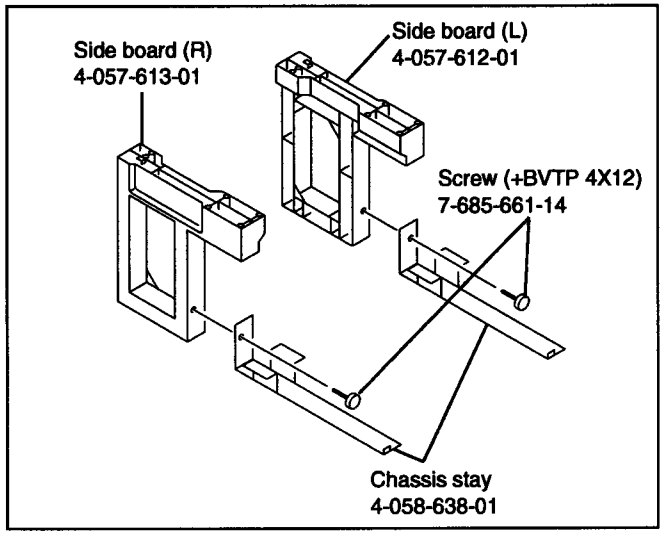
2-8-2. PICTURE TUBE REMOVAL (KP-48V45/53V45/61V45)

CAUTION: Removing the arrow-marked screws is strictly prohibited.
If removed, it may cause liquid spill.

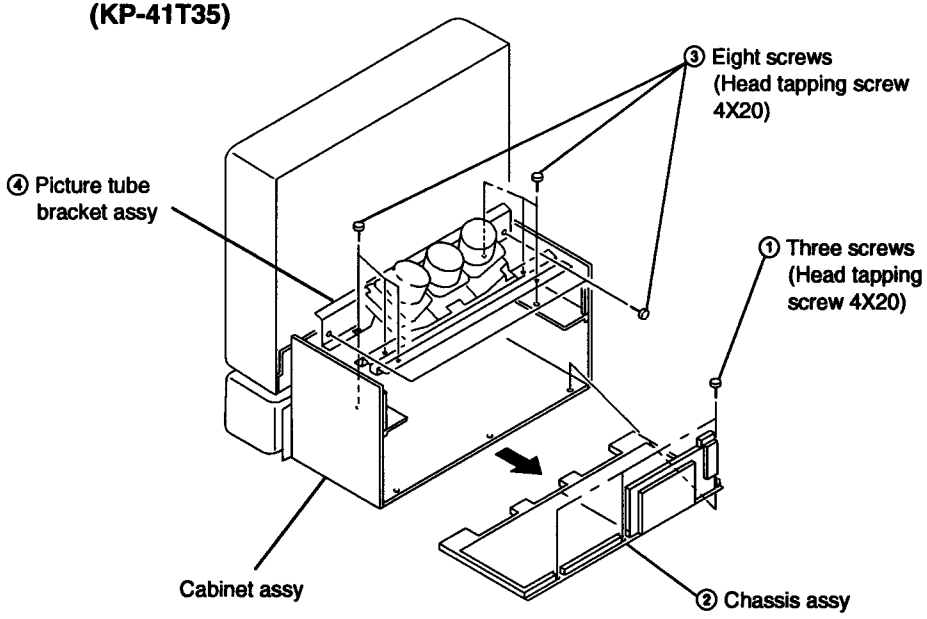


2-9-1. SERVICE STAY ASSY HOW TO USE AND CARRY BACK SERVICE STAY ASSY

SERVICE STAY ASSY



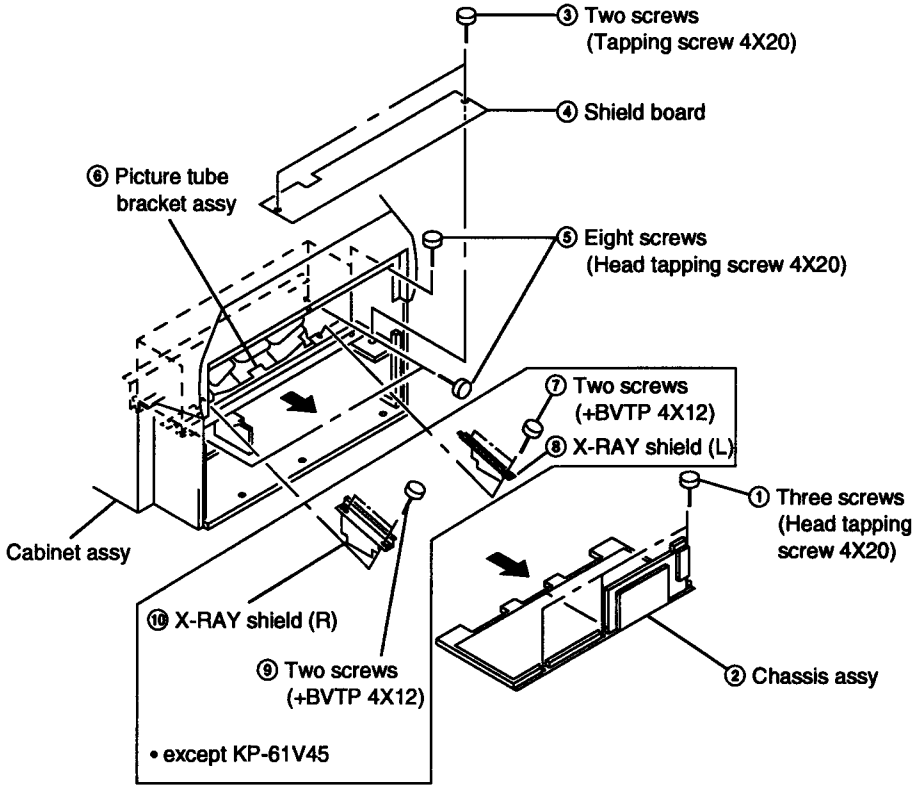
2-9-2. PICTURE TUBE BRACKET ASSY REMOVAL (KP-41T35)


③ Eight screws (Head tapping screw 4X20)
④ Picture tube bracket assy
① Three screws (Head tapping screw 4X20)
Cabinet assy
② Chassis assy

1) Remove ① three screws (head tapping screw 4X20) and pull out ② chassis assy from cabinet assy.
2) Remove ③ eight screws (head tapping screw 4X20) and release ④ picture tube bracket assy from cabinet assy.

2-9-3. PICTURE TUBE BRACKET ASSY REMOVAL (KP-48V45/53V45/61V45)

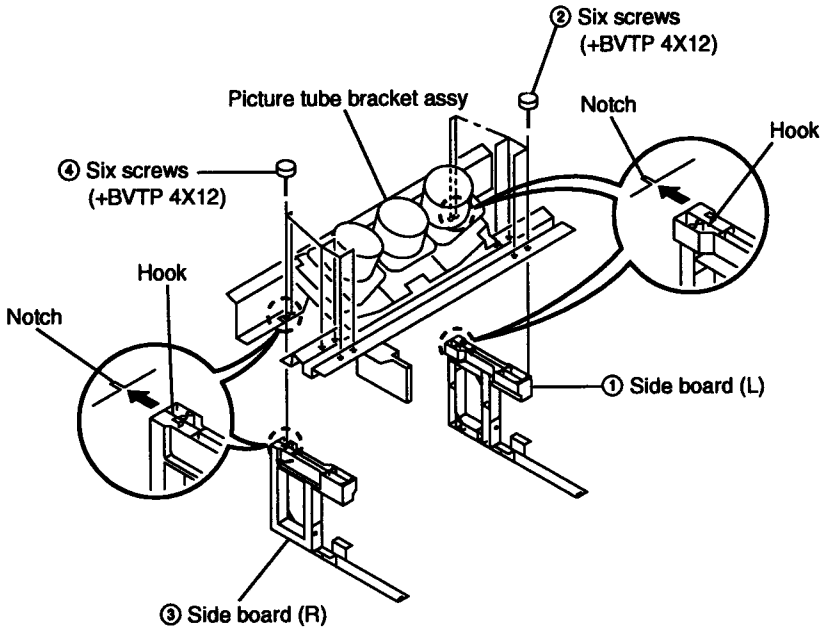
- **Disassemble HA board and speaker cord.**
- **Disassemble all the harness from purse lock.**


③ Two screws (Tapping screw 4X20)
④ Shield board
⑥ Picture tube bracket assy
⑤ Eight screws (Head tapping screw 4X20)
⑦ Two screws (+BVTP 4X12)
⑧ X-RAY shield (L)
① Three screws (Head tapping screw 4X20)
Cabinet assy
⑩ X-RAY shield (R)
⑨ Two screws (+BVTP 4X12)
② Chassis assy
• except KP-61V45

1) Remove ① three screws (head tapping screw 4X20) and pull out ② chassis assy from cabinet assy.
2) Remove ③ two screws (tapping screw 4X20) and remove ④ shield board.
3) Remove ⑤ eight screws (head tapping screw 4X20) and release ⑥ picture tube bracket assy from cabinet assy.

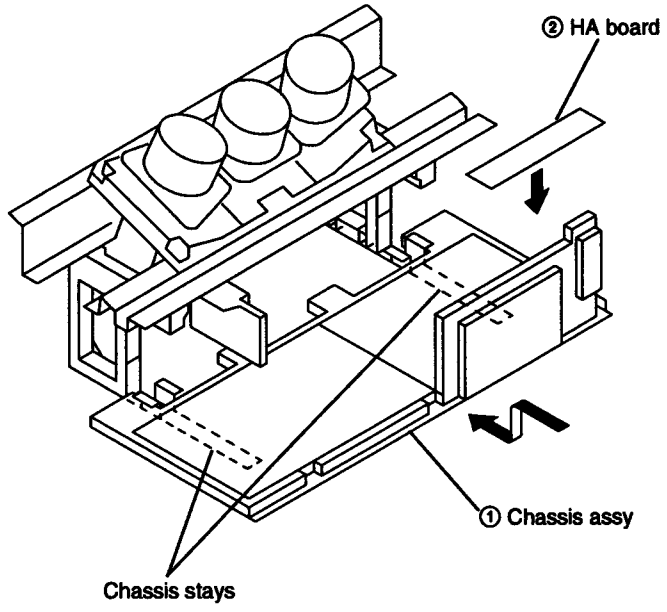
4) Remove ⑦ two screws (+BVTP 4X12) and remove ⑧ X-RAY shield (L).
5) Remove ⑨ two screws (+BVTP 4X12) and remove ⑩ X-RAY shield (R).
• except KP-61V45

2-9-4. SETTING OF SERVICE STAY ASSY. (KP-41T35/48V45/53V45)



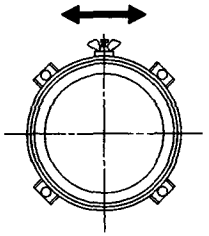
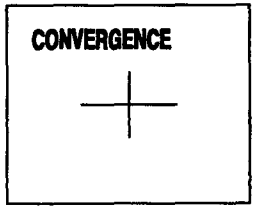
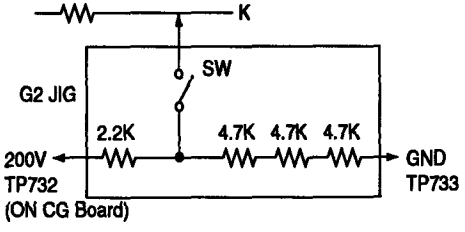
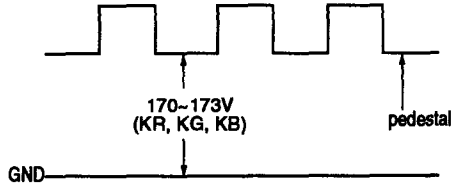
1) Lift up picture tube bracket assy and fit the hook of ① side board (L) to the notch on the assy. Then fix then with ② six screws (+BVTP 4X12).
2) Lift up picture tube bracket assy and fit the hook of ③ side board (R) to the notch on the assy. Then fix then with ④ six screws (+BVTP 4X12).

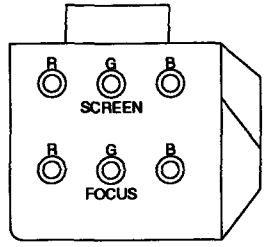
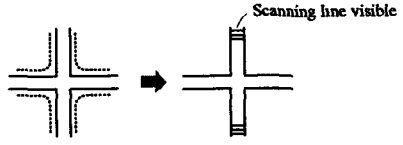
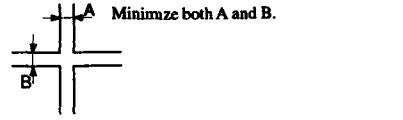
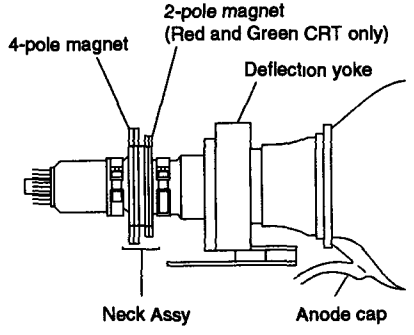
2-9-5. INSTALL A CHASSIS ASSY

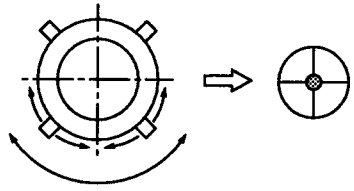
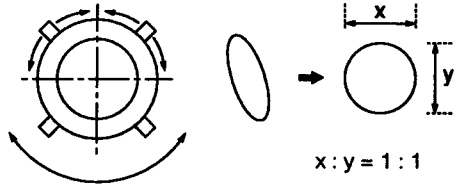
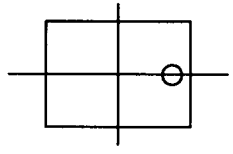
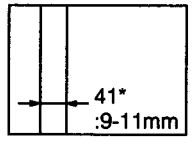


1) Put ① chassis assy on chassis stays.
2) Put ② HA board on ① chassis assy.
3) Put HV bracket on ① chassis assy. (KP-41T35 only)
4) You can carry the chassis assy in this condition.

SECTION 3
SET-UP ADJUSTMENTS

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
SCREEN VOLTAGE ADJUSTMENT (ROUGH ALIGNMENT) 1. Turn the red VR on the FOCUS block all the way to the left and then gradually turn it to the right until the point where you can see the retrace line. 2. Next gradually turn it to the left to the position where the retrace line disappears. **FOCUS LENS ADJUSTMENT** 1. Loosen the lens screw. 2. Set in service mode. 3. Use VP on the service mode menu to show only the green colour. 4. Press the Commander Menu button and select FEATURES and CONVERGENCE to display the test signal on the screen. 5. Rotate the green lens and align with the optimal focus point from the test signal. 6. Use RG-RH from the service mode menu to set to green and red. 7. Disply the test signal and rotate the red lens to obtain the optimum focus at the point where the red and green spots overlap. 8. Use RG-BH from the service mode menu to set to red and blue. 9. Disply the test signal and rotate the blue lens to obtain the optimum focus at the point where the blue and red spots overlap. 10. Tighten the lens screw. **SCREEN (G2) ADJUSTMENT** 1. Select VIDEO mode without signals. 2. Connect the G2 JIG between TP732 (200V) and TP733 (GND) on the CG Board. 3. Connect an oscilloscope to the TP701 (KR), TP731 (KG) and TP761 (KB) of CR board, CG board and CB board. 4. Adjust 170~173V (KR, KG, KB) by rotating screen VR on the focus block.	Monoscope Pattern		PICTURE .....minimum BRIGHTNESS .....50% SCREEN (G2)	 Lens   

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
FOCUS VR ADJUSTMENT 1. Set in service mode. 2. Use VP on the service mode menu to show only the green colour. 3. Press the Commander Menu button (convergence) and output the test signal. 4. Rotate the green VR on the FOCUS block and align to obtain the optimal focus point. 5. Use RG-RH from the service mode menu to set to green and red. 6. Disply the test signal and rotate the red VR to obtain the optimum focus at the point where the red and green spots overlap. 7. Use RG-BH from the service mode menu to set to red and blue. 8. Disply the test signal and rotate the blue VR aligning to obtain the optimum focus at the point where the blue and green spots overlap.				 FOCUS block  
DEFLECTION YOKE TILT ADJUSTMENT 1. Set in service mode. 2. Set to receive the monoscope signal. 3. Use VP on the service mode menu to show only the green colour. 4. Loosen the deflection yoke set screw and align the tilt of the deflection yoke so that the bars at the centre of the monoscope pattern are horizontal. 5. After aligning the deflection yoke, fasten it securely to the funnel-shaped portion (neck) of the CRT. 6. The tilt of the deflection yoke for red is aligned with RG-RH on the service mode menu, and the tilt on the deflection yoke for blue is aligned with RG-BH on the service menu, is aligned the same as was done for green.	Monoscope pattern			

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
2-POLE MAGNET ADJUSTMENT 1. Set in Service mode. 2. Set to receive the dot pattern signal. 3. Place the caps on the red and blue lens so that only the green color is shown. 4. Turn the green VR on the focus block to the right and set to overfocus to enlarge the spot. 5. Now align the 2-Pole Magnet so that the enlarged spot is in the center of the Just Focus spot. 6. Align the green focus VR and set for just (precise) focus. 7. Perform the same alignment for red and blue.	Dot pattern		2-pole magnet	Use the center dot 
4-POLE MAGNET ADJUSTMENT 1. Set in service mode. 2. Set to receive the dot pattern signal. 3. Remove CN302 connector for A board. 4. Place the caps on the red and blue lens so that only the green color is shown. 5. Turn the green VR on the focus block to the left and set to underfocus to enlarge the spot. 6. Now align the 4-Pole Magnet so that the enlarged spot becomes a perfect circle.	Dot pattern		4-pole magnet	Use the center dot 
DEFOCUS ADJUSTMENT 1. Receive the crosshatch signal. 2. Adjust the FOCUS knob so that the crosshatch pattern vertical line width is as in the figure on the right. 3. Blue only defocus Adjustment.	Dot pattern		FOCUS VR • RED • GREEN • BLUE	• Focus adjustment point   without flare

ELECTRICAL ADJUSTMENT BY REMOTE COMMANDER

By using Remote Commander (RM-Y136A/RM-Y901), all circuit adjustments can be made.

NOTE : Test Equipment Required.

1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio oscillator

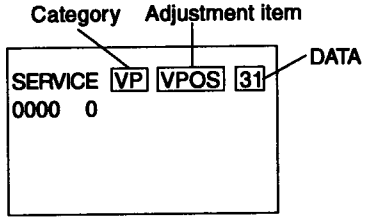
1. METHOD OF SETTING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

1. Standby mode. (Power off)
2. [DISPLAY] → [5] → [VOL (+)] → [TV POWER] on the Remote Commander.

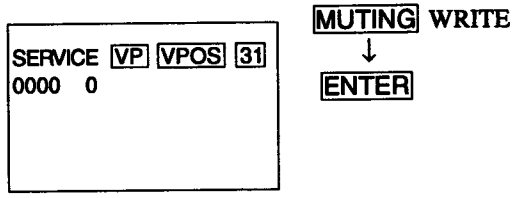
([+] → [5] → ◿ → [ ]) (Press each button within a second.)

SERVICE MODE ADJUSTMENT



3. The CRT displays the item being adjusted.
4. Press [1] or [4] on the Remote Commander to select the adjustment item.
5. Press [3] or [6] on the Remote Commander to change the data.
6. Press [2] or [5] on the Remote Commander to select the category.
7. If you want to recover the latest values press [7] then [ENTER] to read the memory.
8. Press [MUTING] then [ENTER] to write into memory.

SERVICE ADJUSTMENT MODE MEMORY

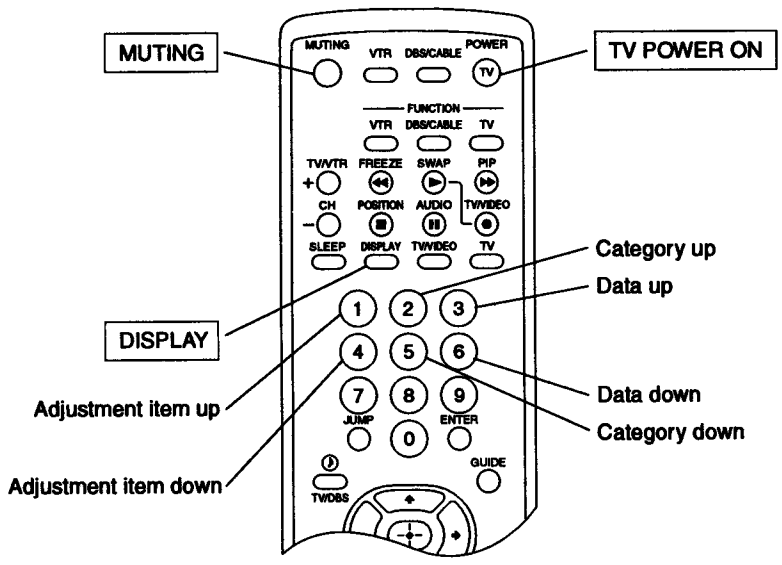


8. Press [8] then [ENTER] on the Remote Commander to initialize.
9. Turn set off and on to exit.

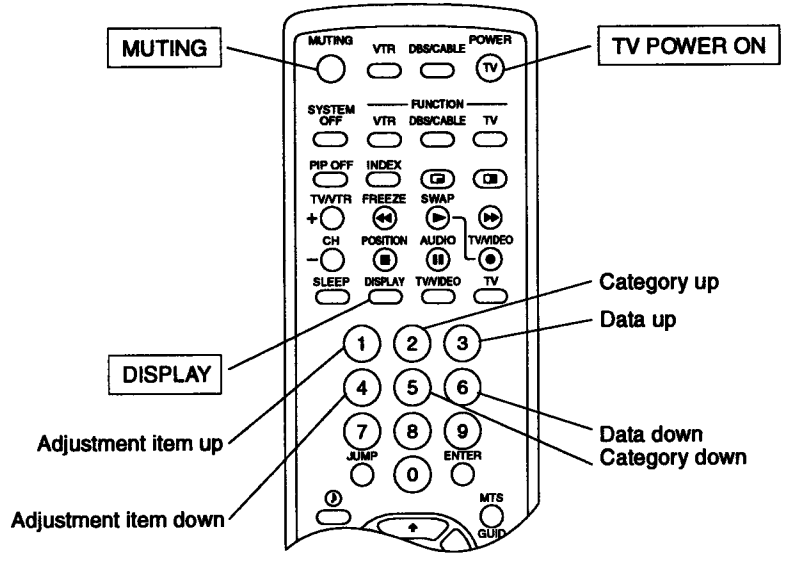
2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, remove the plug from AC outlet, and then replace the plug in AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again and confirm they were adjusted.

3. ADJUST BUTTONS AND INDICATOR



RM-Y136A (KP-41T35)



RM-Y901 (except KP-41T35)

4. SERVICE MODE LIST

VP

Category	Adjustment item	Standard data	Data range	Note
VP	VPOS		0-63	V SHIFT
	VSIZ		0-63	V SIZE
	VCOM	0	0-3	HV-COMP-V
	VLIN	7	0-15	V LIN
	VSCO	7	0-15	S CORRECTION
	HPOS	7	0-15	H SHIFT
	HSIZ		0-63	H SIZE
	PAMP		0-63	PIN AMP
	UPIN	7	0-15	UPPER CORNER PIN
	LPIN	7	0-15	LOWER CORNER PIN
	PPHA	7	0-15	H TRAPEZOID
	AFC	2	0-3	AFC LOOP GAIN
	VBOW	7	0-15	V BOW
	VANG	7	0-15	V ANGLE
	REF	3	0-3	AKB REFERENCE
	GDRV		0-63	GREEN DRIVE
	BDRV		0-63	BLUE DRIVE
	GCUT		0-15	GREEN CUT OFF
	BCUT		0-15	BLUE CUT OFF
	SCON		0-15	SUB CONTRAST
	SHUE		0-15	SUB HUE
	SCOL		0-15	SUB COLOR
	SBRT		0-63	SUB BRIGHTNESS
	SSHP	7	0-15	SUB SHARPNESS
	GMMA	1	0-3	GAMMA LEVEL
	CDM2	0	0,1	COUNT DOWN MODE 2
	DPIX	1	0,1	DYNAMIC PICTURE
	Y-DC	1	0,1	DC TRANSMISSION RATIO
	ABLM	1	0,1	ABL MODE
	AXIS	0	0,1	R-Y, G-Y AXIS
	NOTC	0	0,1	C TRAP
	CROM	7	0-15	C TRAP F0
	TOT	0	0,1	C TOT FILTER
	PREL	3	0-3	PRE/OVER LEVEL
	SHPF	3	0-3	SHARPNESS F0
	RON		0,1	RED ON/OFF
	GON		0,1	GREEN ON/OFF
	BON		0,1	BLUE ON/OFF
	DCOL		0,1	DYNAMIC COLOR
	CDMD	0	0,1	V COUNT DOWN
	LBLK	13	0-15	H BLK WIDTH LEFT SIDE
	RBLK	13	0-15	H BLK WIDTH RIGHT SIDE

AP

Category	Adjustment item	Standard data		Data range	Note
		41T	V		
AP	SVOL	0	0	0-15	SUB VOLUME
	SBAL	7	7	0-15	SUB BLANCE
	SBAS	9	7	0-15	SUB BASS
	STRE	6	7	0-15	SUB TREBLE

RG

Category	Adjustment item	Standard data	Data range	Note
RG	GH CENT		-127- +127	GREEN H SENT
	GH SKEW		-127-+127	GREEN H SKEW
	GH BOW		-127-+127	GREEN H BOW
	GH 4BOW		-127-+127	GREEN H 4TH BOW
	GH SIZE		-127-+127	GREEN H SIZE
	GH LIN		-127-+127	GREEN H LINEARITY
	GH MSIZ		-127-+127	GREEN H MID SIZE
	GH MLIN		-127-+127	GREEN H MID LINEARITY
	GH KEY		-127-+127	GREEN H KEY
	GH SSKW		-127-+127	GREEN H SUB SKEW
	GH MPIN		-127-+127	GREEN H MID PIN
	GH PIN		-127-+127	GREEN H PIN
	GH SBOW		-127-+127	GREEN H SUB BOW
	GH MBOW		-127-+127	GREEN H MID BOW
	GH 4PIN		-127-+127	GREEN H 4TH PIN
	GH 4SBO		-127-+127	GREEN H 4TH SUB BOW
	GV CENT		-127-+127	GREEN V CENT
	GV SKEW		-127-+127	GREEN V SKEW
	GV BOW		-127-+127	GREEN V BOW
	GV SIZE		-127-+127	GREEN V SIZE
	GV LIN		-127-+127	GREEN V LINEARITY
	GV MSIZ		-127-+127	GREEN V MID SIZE
	GV MKEY		-127-+127	GREEN V MID KEY
	GV KEY		-127-+127	GREEN V KEY
	GV SSKW		-127-+127	GREEN V SUB SKEW
	GV MPIN		-127-+127	GREEN V MID PIN
	GV PIN		-127-+127	GREEN V PIN
	GV SBOW		-127-+127	GREEN V SUB BOW
	GV WAVE		-127-+127	GREEN V WAVE
	GV 4PIN		-127-+127	GREEN V 4TH PIN
	RH CENT		-95-+96	RED H CENT
	RH SKEW		-127-+127	RED H SKEW
	RH BOW		-127-+127	RED H BOW
RG	RH 4BOW		-127-+127	RED H 4TH BOW
	RH SIZE		-127-+127	RED H SIZE
	RH LIN		-127-+127	RED H LINEARITY
	RH MSIZ		-127-+127	RED H MID SIZE
	RH MLIN		-127-+127	RED H MID LINEARITY
	RH KEY		-127-+127	RED H KEY
	RH SSKW		-127-+127	RED H SUB SKEW
	RH MPIN		-127-+127	RED H MID PIN
	RH PIN		-127-+127	RED H PIN
	RH SBOW		-127-+127	RED H SUB BOW
	RH MBOW		-127-+127	RED H MID BOW
	RH 4PIN		-127-+127	RED H 4TH PIN
	RH 4SBO		-127-+127	RED H 4TH SUB BOW
	RV CENT		-95-+96	RED V CEVT
	RV SKEW		-127-+127	RED V SKEW
	RV BOW		-127-+127	RED V BOW
	RV SIZE		-127-+127	RED V SIZE
	RV LIN		-127-+127	RED V LINEARITY
	RV MSIZ		-127-+127	RED V MID SIZE
	RV MKEY		-127-+127	RED V MID KEY
	RV KEY		-127-+127	RED V KEY
	RV SSKW		-127-+127	RED V SUB SKEW
	RV MPIN		-127-+127	RED V MID PIN
	RV PIN		-127-+127	RED V PIN
	RV SBOW		-127-+127	RED V SUB BOW
	RV WAVE		-127-+127	RED V WAVE
	RV 4PIN		-127-+127	RED V 4TH PIN
	RV WING		-31-+32	RED V WING
	BH CENT		-95-+96	BLUE H CENT
	BH SKEW		-127-+127	BLUE H SKEW
	BH BOW		-127-+127	BLUE H BOW
	BH 4BOW		-127-+127	BLUE H 4TH BOW
	BH SIZE		-127-+127	BLUE H SIZE
	BH LIN		-127-+127	BLUE H LINEARITY
	BH MSIZ		-127-+127	BLUE H MID SIZE
	BH MLIN		-127-+127	BLUE H MID LINEARITY
	BH KEY		-127-+127	BLUE H KEY
	BH SSKW		-127-+127	BLUE H SUB SKEW
	BH MPIN		-127-+127	BLUE H MID PIN
	BH PIN		-127-+127	BLUE H PIN
	BH SBOW		-127-+127	BLUE H SUB BOW
	BH MBOW		-127-+127	BLUE H MID BOW

Category	Adjustment item	Standard data	Data range	Note
RG	BH 4PIN		-127-+127	BLUE H 4TH PIN
	BH 4SBO		-127-+127	BLUE H 4TH SUB BOW
	BV CENT		-95-+96	BLUE V CENT
	BV SKEW		-127-+127	BLUE V SKEW
	BV BOW		-127-+127	BLUE V BOW
	BV SIZE		-127-+127	BLUE V SIZE
	BV LIN		-127-+127	BLUE V LINEARITY
	BV MSIZ		-127-+127	BLUE V MID SIZE
	BV MKEY		-127-+127	BLUE V MID KEY
	BV KEY		-127-+127	BLUE V KEY
	BV SSKW		-127-+127	BLUE V SUB SKEW
	BV MPIN		-127-+127	BLUE V MID PIN
	BV PIN		-127-+127	BLUE V PIN
	BV SBOW		-127-+127	BLUE V SUB BOW
	BV WAVE		-127-+127	BLUE V WAVE
	BV 4PIN		-127-+127	BLUE V 4TH PIN
	BV WING		-31-+32	BLUE V WING

CC

Category	Adjustment item	Standard data	Data range	Note
CC	CRIH	9	0-15	CRI COUNT HIGH
	CRIL	2	0-15	CRI COUNT LOW
	CFLD	5	0-15	FIXED FIELD COUNT
	CCDI	3	0-7	NO CCD INT COMPARE
	CRIP	4	0-7	CRI & PARITY ERROR
	CRIT	1	0-3	CRI TIME CONSTANT
	CSB1	3	0-3	SYNC SLICE BIAS 1
	CSB2	4	0-7	SYNC SLICE BIAS 2
	CCBD	4	0-15	C SYNC BACKPORCH DET
	CCFD	7	0-15	C SYNC FRONTPORCH DET
	CREP	142	0-255	CRI SIGNAL END POSITION
	CSEP	186	0-255	START BIT END POSITION
	CRBD	8	0-15	CRI BACKPORCH DET
	CRFD	9	0-15	CRI FRONTPORCH DET
	CSSD	3	0-15	STROBE WINDOW ST DLY
	CSED	9	0-15	STROBE WINDOW ED DLY
	CSBS	12	0-31	START BIT THRESHOLD
	CDSD	8	0-31	DATA START DELAY
	CCDS	9	0-31	CAPTION DT THRESHOLD
	CHMK	42	0-63	H SYNC MASK WIDTH
	CHSY	136	0-255	H SYNC VCO COUNT

OP

Category	Adjustment item	Standard data	Data range	Note
OP	DISP		0-63	OSD POSITION
	PDPS		0-255	FAV/IDX CH POSITION
	PDPO		0-7	CH POSITION (OFF SET)

ID

Category	Adjustment item	Standard data		Data range	Note
		41T	V		
ID	ID0	25	25	0-255	MODEL ID#0
	ID1	55	55	0-255	MODEL ID#1
	ID2	31	47	0-255	MODEL ID#2
	ID3	0	0	0-255	MODEL ID#3
	ID4	155	155	0-255	MODEL ID#4
	ID5	177	181	0-255	MODEL ID#5
	ID6	198	214	0-255	MODEL ID#6
	ID7	66	70	0-255	MODEL ID#7

PP

Category	Adjustment item	Standard data		Data range	Note
		41T	V		
PP	BGHP	-		0-15	PIP H POSITION
	BGVP	-		0-15	PIP V POSITION
	MAHP	-		0-15	P&P MAIN H AQUISITION
	MAVP	-		0-255	P&P MAIN V AQUISITION
	SAHP	-		0-15	P&P SUB H AQUISITION
	SAVP	-		0-255	P&P SUB V AQUISITION
	DECS	-	18	0-31	S DECODER REGISTERS
	DECM	-	18	0-31	M DECODER REGISTERS
	DIS	-	66	0-127	DISPLAY SETTING
	BSIZ	-	2	0-15	BORDER SIZE
	6BIT	-	1	0-3	6bit (SMART6/SKIP6)
	VPED	-		0-15	V OFFSET
	UPED	-		0-15	U OFFSET

PS

Category	Adjustment item	Standard data	Data range	Note
PS	PIPH		0-127	PIP H POSITION
	PIPV		0-63	PIP V POSITION
	PMVD	26	0-31	PIP V PULSE DELAY(M)
	PIVD	22	0-31	PIP V PULSE DELAY(I)
	PCON		0-15	PIP CONTRAST(I)

Category	Adjustment item	Standard data	Data range	Note
PS	FRMY	7	0-15	PIP FRAME Y LEVEL
	IPER	0	0-15	PIP PEDESTAL R-Y(I)
	IPEB	0	0-15	PIP PEDESTAL B-Y(I)
	IHUE		0-15	PIP SUB HUE
	ICOL		0-15	PIP SUB COLOR
	PHDL	3	0-15	PIP H PULSE DELAY
	PYSD	0	0-15	PIP SELECT DELAY
	PYDL	0	0-7	PIP Y DELAY
	PCPS	0	0,1	PIP CLP
	PCPF	0	0,1	PIP CLP CYCLES
	PSEL	0	0,1	PIP SELDOWN
	PPLL	0	0-3	PIP PLL
	CHRI	1	0,1	PIP INPUT POLARITY
	CHRO	0	0,1	PIP OUTPUT POLARITY

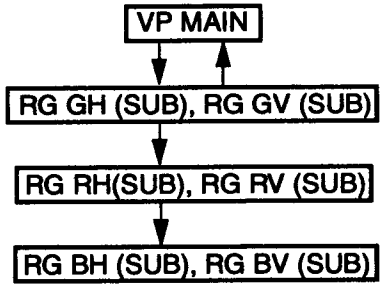
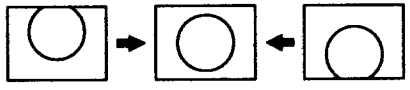
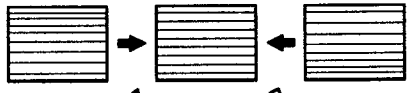
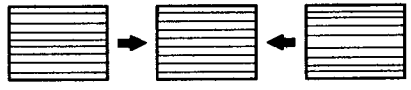
MC

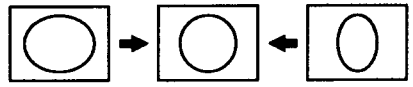
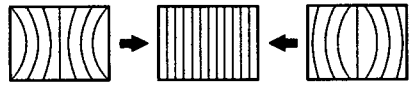
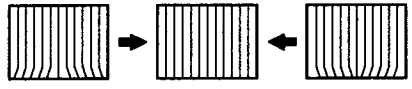
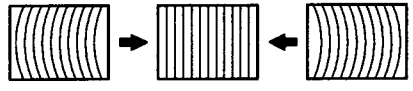
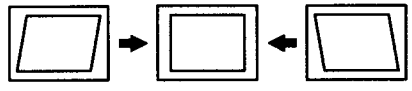
Category	Adjustment item	Standard data	Data range	Note
MC	MSCN	-	0-15	P&P MAIN SUB CONTRAST
	MSHU	-	0-15	P&P MAIN SUB HUE
	MSCL	-	0-15	P&P MAIN SUB COLOR
	MUPD	-	0-15	P&P MAIN U OFFSET
	MVPD	-	0-15	P&P MAIN V OFFSET
	MDLY	-	0-3	P&P MAIN Y DELAY
	MBGR	-	0-3	P&P MAIN SCP CONTROL(1)
	MBGF	-	0-3	P&P MAIN SCP CONTROL(2)

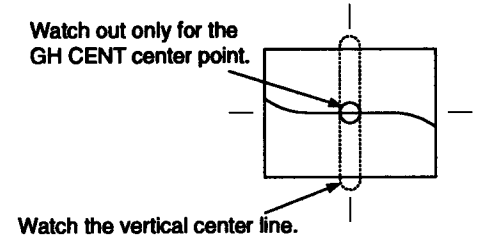
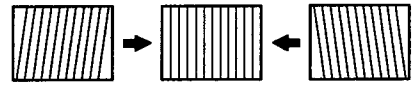
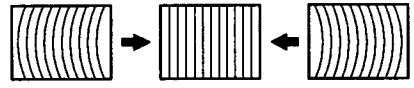
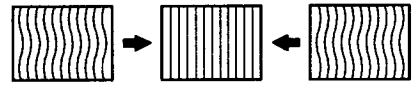
IC

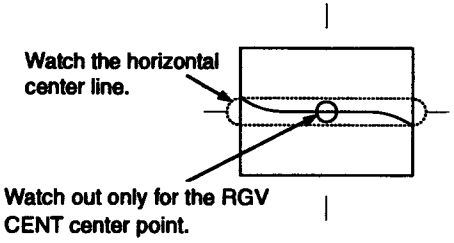
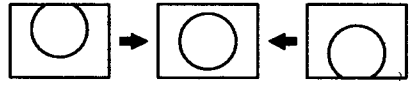
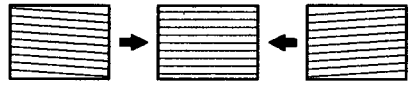
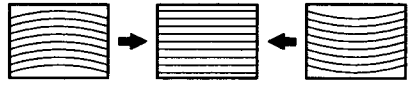
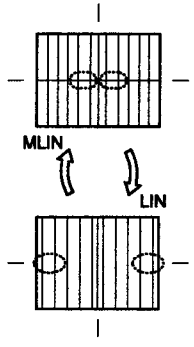
Category	Adjustment item	Standard data		Data range	Note
		41T	V		
IC	SSCN	-		0-15	P&P SUB SUB CONTRAST
	SSHU	-		0-15	P&P SUB SUB HUE
	SSCL	-		0-15	P&P SUB SUB COLOR
	SUPD	-		0-15	P&P SUB U OFFSET
	SVPD	-		0-15	P&P SUB V OFFSET
	SDLY	-	0	0-3	P&P SUB Y DELAY
	SBGR	-	1	0-3	P&P SUB SCP CONTROL(1)
	SBGF	-	1	0-3	P&P SUB SCP CONTROL(2)
	PAFC	-	2	0-3	PIP AFC LOOP GAIN
	PTOT	-	0	0,1	PIP CHROMA TOT FILTER
	PYDR	-	15	0-31	PIP Y DRIVE
	PYDC	-	4	0-7	PIP DC TRAN

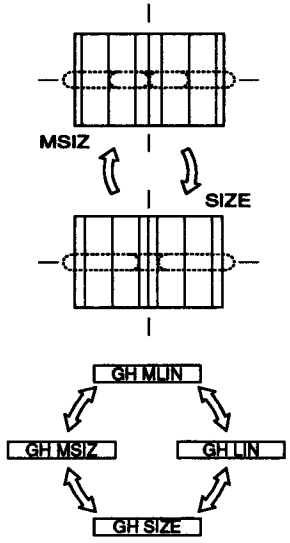
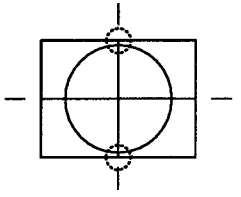
Category	Adjustment item	Standard data		Data range	Note
		41T	V		
IC	PSHP	-	1	0,1	PIP SHARPNESS F0
	PDPI	-	1	0,1	PIP DYNAMIC PICTURE
	PSYS	-	0	0-3	PIP COLOR SYSTEM
	PXTL	-	0	0-3	PIP X' TAL
	PLOP	-	0	0-3	PIP COLOR LOOP

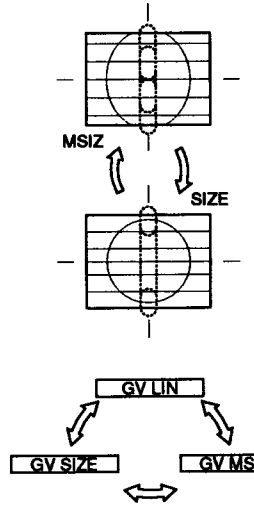
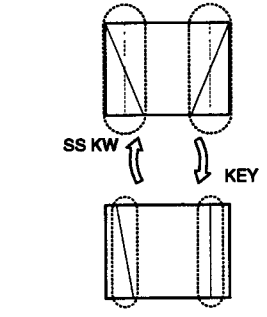
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
CONVERGENCE ADJUSTMENT ●When replacing the deflection yoke, always perform "DEFLECTION YOKE TILT ADJUSTMENT" before adjusting the convergence. Adjustment procedure  				
• GREEN REGISTRATION ADJUSTMENT			<VP MENU>	
• V-SHIFT adjustment	Monoscope pattern or Crosshatch pattern		VP VPOS	VPOS 
• V-LINEARITY adjustment			VP VSIZ	VSIZ
• V-SIZE, V-CORRECTION adjustment While tracking, adjust so that the lattice intervals for VSIZ and VSCO are equal.			VP VLIN VP VSCO	VLIN  VSCO 

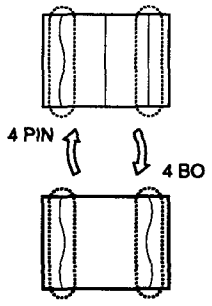
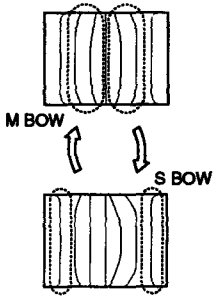
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
• H-SHIFT adjustment			VP HPOS	HPOS
• H-SIZE adjustment Finely adjust with SUB MSIZ.			VP HSIZ	HSIZ 
• PIN-AMP adjustment Finely adjust with SUB MPIN.			VP PAMP	PAMP 
• UPPER/LOWER-CORNER PIN adjustment Correct the screens top and bottom bow line. However, if this adjustment is overdone, distortion may occur with the PIN-AMP adjustment that can not be re-adjusted. Note : The PIN-AMP adjusts the overall screen from top to bottom, but the UPPER/LOWER-CORNER PIN adjustments have large movement in the top and bottom sections, so be careful.			VP UPIN VP LPIN	UPIN LPIN 
• V-BOW, V-ANGLE adjustment Correct the tilt and bow of the vertical line at the center of the screen.			VP VBOW VP VANG	VBOW  VANG 

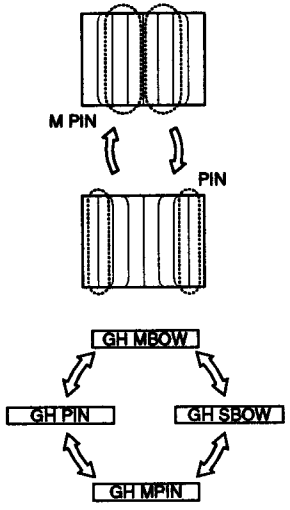
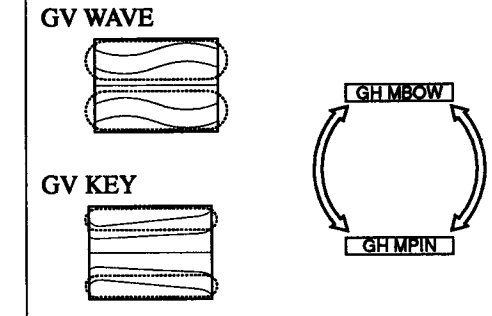
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
• GREEN SUB ADJUSTMENT **SCREEN CENTER SECTION GREEN VERTICAL LINE ADJUSTMENT** 1. Finely adjust with GH CENT, GH BOW, GH SKEW. Adjust by watching out for the RGH CENT screen center section.			<RG-GH MENU> GH CENT GH SKEW GH BOW	 GH CENT GH SKEW  GH BOW 
2. GH 4TH BOW adjustment Correct the corner distortion that could not be adjusted away with the GH BOW adjustment.			GH 4BOW	GH 4BOW 

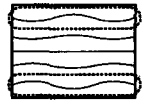
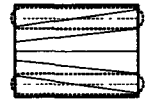
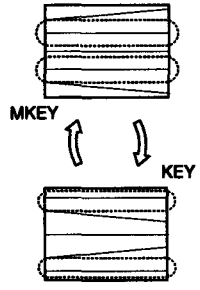
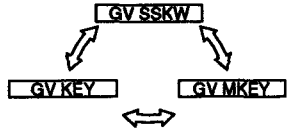
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
SCREEN CENTER SECTION GREEN HORIZONTAL LINE ADJUSTMENT 1. Finely adjust the center position of the vertical line at the center of the screen with GV CENT.			<RG-GV MENU> GV CENT	 GV CENT 
2. Correct the tilt and bow of the horizontal line at the center of the screen with GV SKEW and GV BOW.			GV SKEW GV BOW	GV SKEW  GV BOW 
GREEN SIZE AND LINEARITY ADJUSTMENT 1. Balance the sizes at both sides of the center section of the screen with GH MLIN. 2. Balance the sizes on both end sections of the screen with GH LIN. 3. While tracking, adjust with GH MLIN and GH LIN so that the sizes of the horizontal line at the center of the screen are symmetrical left and right.			<RG-RH MENU> GH MLIN GH LIN	

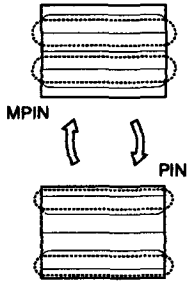
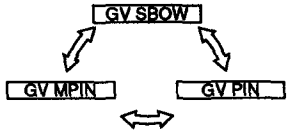
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
GREEN HORIZONTAL SIZE ADJUSTMENT 1. Adjust with GH MSIZE so that the sizes of both ends and of both sides of the center section of the screen are equal. 2. Adjust with GH SIZE so that the horizontal sizes of both ends and of both sides of the center section of the screen are equal. 3. While tracking, adjust with GH MSIZ and GH SIZE so that the lattice intervals for the horizontal line section of the center section of the screen are equal and so that the horizontal size is the prescribed value. 4. If M LIN is changed when the GH MSIZ and GH SIZE adjustment is complete, adjust again while tracking. ●With just the H SIZE adjustment in MAIN, if there is no need to adjust GH SIZE in SUB this can save power.			<RG-GH MENU> GH MSIZ GH SIZE	
GREEN VERTICAL LINEARITY ADJUSTMENT 1. Adjust GV LIN so that the vertical lines at the top and bottom of the screen are symmetrical.			<RG-GV MENU> GV LIN	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
GREEN VERTICAL SIZE ADJUSTMENT 1. Adjust with GV MSIZE so that the sizes for the top and bottom sections of the screen and for both sides of the center section of the screen are equal. 2. Set the vertical size to the prescribed value with GV SIZE. 3. Adjust GV MSIZ and GV SIZE watching the vertical line at the center section of the screen. 4. While tracking, adjust with GV MSIZ and GV SIZE so that the lattice intervals for the vertical line section of the center section of the screen are equal and so that the vertical size is the regulation value. 5. If GV LIN is out of place when the GV MSIZ and GV SIZE adjustment is complete, adjust again while tracking. ●If there is no need to adjust GV SIZE in SUB with just the V SIZE adjustment in MAIN, this can save power.			<RG-GV MENU> GV MSIZ GV SIZE	
GREEN HORIZONTAL TRAPEZOIDAL DISTORTION ADJUSTMENT 1. Adjust with GH SSKW so that the tilt of the vertical lines at both ends of the screen is symmetrical left and right. 2. Adjust with GH KEY so that there is no tilt in the vertical lines at both ends of the screen. 3. If there is a tilt on either the left or right after the GH KEY adjustment, adjust while tracking.			<RG-GH MENU> GH SSKW GH KEY	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
GREEN HORIZONTAL QUATERNARY ADJUSTMENT 1. Correct the quaternary distortion with GH 4PIN. 2. While balancing, correct the quaternary distortion of both end sections of the screen with GH 4SBO. 3. While tracking, adjust with GH 4PIN and GH 4SBO.			<RG-GH MENU> GH 4PIN GH 4BOW	
GREEN HORIZONTAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT 1. Adjust with GH MBOW so that the pin asymmetry at both sides of the center section of screen is symmetrical. 2. Adjust with GH SBOW so that the bow at both end sections of the screen is symmetrical left and right. 3. While tracking, adjust with GH MBOW and GH SBOW so that the bow of vertical lines on the entire screen is symmetrical left and right.			<RG-GH MENU> GH MBOW GH SBOW	

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
GREEN HORIZONTAL SYMMETRICAL PIN DISTORTION ADJUSTMENT 1. Adjust the pin distortion at both sides of the center section of the screen with GH MPIN. 2. Adjust the pin distortion at both end sections of the screen with GH PIN. 3. While tracking, adjust with GH MPIN and GH PIN so that the PIN of vertical lines on the entire screen have no bowing. 4. If there is asymmetrical pin distortion after the GH MPIN and GH PIN adjustments, adjust with GH MBOW and GH SBOW while tracking. ●With just the PIN AMP adjustment in MAIN, if there is no need to adjust GV PIN in SUB, this can save power.			<RG-GH MENU> GH MPIN * GH PIN GH MBOW GH SBOW	
GREEN VERTICAL WAVE (TERTIARY DISTORTION) ADJUSTMENT 1. Take the screen top and bottom horizontal lines with GV WAVW and find the secondary and quaternary waveform. 2. There is KEY distortion after the GV WAVW adjustment, so adjust with GV WAVW and GV KEY while tracking.			<RG-GV MENU> GV WAVE GV KEY	

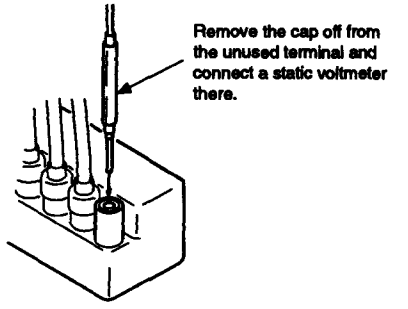
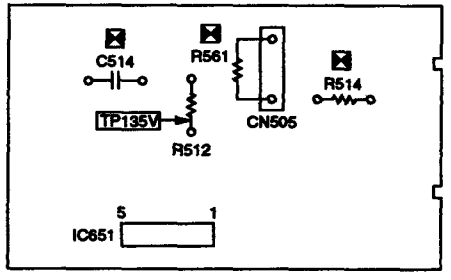
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
GREEN VERTICAL QUATERNARY DISTORTION ADJUSTMENT 1. Correct the quaternary distortion of the horizontal lines at the top and bottom sections of the screen with RGV 4PIN. 1) Since there is no 4SBOW for vertical correction, there will be a slight imbalance, but adjust to eliminate the distortion from the horizontal line at either the top or the bottom of the screen. 2) In many cases, the horizontal lines at the top and bottom sections of the screen are not straight lines after the adjustment. As long as the secondary distortion is mild enough that it can be corrected with the PIN adjustment, this is OK.			<RG-GV MENU> GV 4PIN	GV 4PIN 
GREEN VERTICAL TRAPEZOIDAL DISTORTION ADJUSTMENT 1. Adjust with GV SSKW so that the tilt of the horizontal lines at the top and bottom sections of the screen is symmetrical about the center position horizontal line. 2. Adjust with GV MKEY so that there is no tilt for the line sections at both sides of the horizontal lines at the center section of the stream. 3. Adjust with GV KEY so that there is no tilt for the horizontal lines at the top and bottom sections of the screen. 4. While tracking, adjust with GV MKEY and GV KEY so that there is no tilt for the horizontal lines on the entire screen. 5. If the tilt is unbalanced after the GV MKEY and GV KEY adjustment, adjust again with GV SSKW.			<RG-GV MENU> GV SSKW GV MKEY GV KEY GV SSKW	GV SSKW   

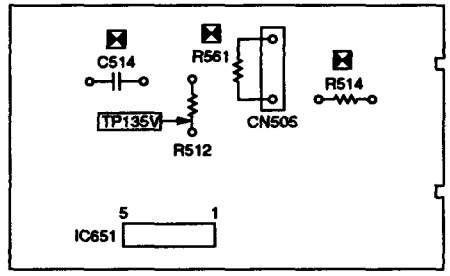
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
GREEN VERTICAL ASYMMETRICAL PIN DISTORTION (SECONDARY DISTORTION) ADJUSTMENT 1. Correct the asymmetrical pin distortion at the top and bottom sections of the screen with GV SBOW.			<RG-GV MENU> GV SBOW	RGV SBOW
GREEN VERTICAL ASYMMETRICAL PIN DISTORTION ADJUSTMENT 1. Adjust the pin distortion for both side sections and the center of the screen with GV MPIN. 2. Adjust with GV PIN so that the horizontal lines at the top and bottom sections of the screen are straight lines. 3. Adjust with GV MPIN and GV PIN so that there is no curve in the horizontal lines on the entire screen.			<RG-GV MENU> GV MPIN GV PIN	
4. After the adjustments in Items 1-3, adjust the tracking with GV SBOW, GV MPIN, and GV PIN.			GV SBOW	

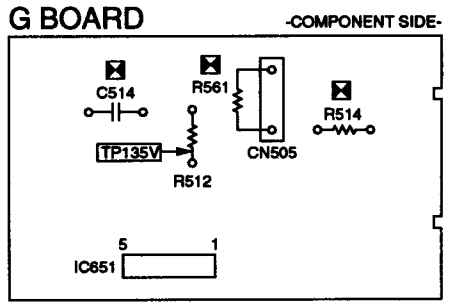
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
GREEN AND RED REGISTRATION ADJUSTMENT (RRH, RRV) 1. Receive a cross-hatch signal. 2. Adjust so that the red lines lay on the green lines. Adjust with the same procedure as the GREEN SUBadjustment. Notes : 1. The main correction is not carried out during red registration adjustment. 2. Beware. The green adjustment items can be changed by mistake. 3. Unlike for green, adjust within the range -127 ~ +128.	Cross-hatch pattern			
GREEN AND BLUE REGISTRATION ADJUSTMENT (RBH, RBV) 1. Receive a cross-hatch signal. 2. Adjust so that the blue and green lines are on top of each other. Notes : 1. The main correction is not carried out during RED registration adjustment. 2. Beware. The GREEN and RED adjustment items can be changed by mistake.	Cross-hatch pattern			

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
AGC ADJUSTMENT 1. Receive an off-air signal. 2. Adjust the AGC VR (TU 1001) so that there is no snow noise and cross-modulation.				
WHITE BALANCE ADJUSTMENT 1. Receive the monoscope pattern signal and adjust the picture quality with the menu. 2. Adjust service mode SBRT so that the signal 10 IRE section barely glows. 3. Receive the all-white pattern signal. 4. Adjust the white balance with service mode GCUT and BCUT. 5. Adjust service mode SBRT so that the signal 100 IRE section barely glows. 6. Adjust the white balance with service mode GDRV and BDRV. 7. Repeatedly adjust the white balance for the minimum and maximum picture settings.	Monoscope pattern All White pattern		PICTURE .....minimun <RGB MENU> RGB SBRT RGB GCUT RGB BCUT PICTURE .....minimun RGB GDRV RGB BDRV PICTURE .....maximum	

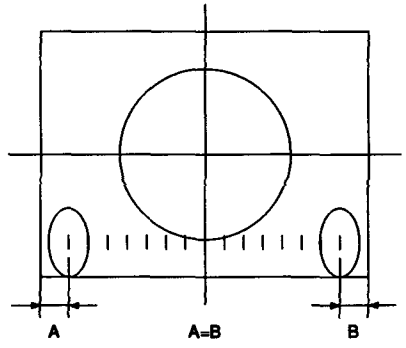
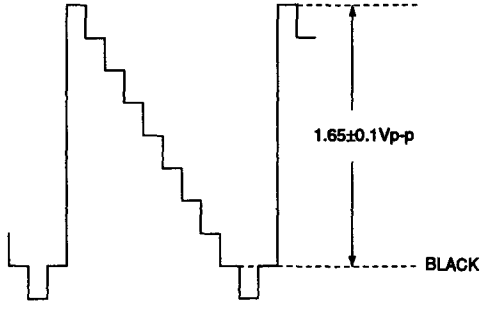
SECTION 4
SAFETY RELATED ADJUSTMENTS

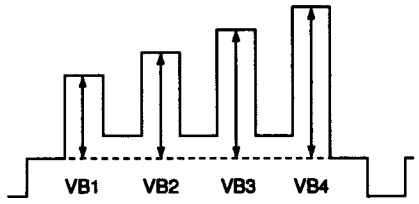
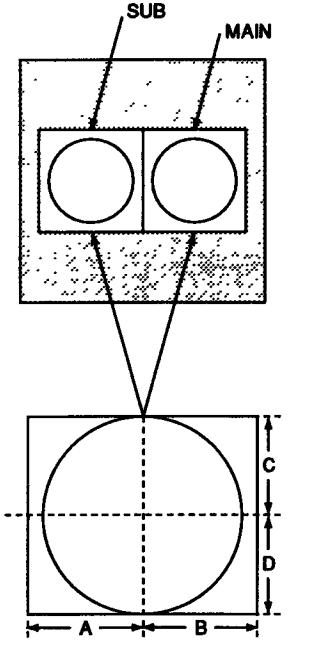
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
[G BOARD] **HV REGULATION CIRCUIT CHECK AND ADJUSTMENT** When replacing the following components marked with ◪ on the schematic diagram always check HV regulation, and if necessary re-adjust. **OPERATION CHECK** 1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block. 2. Power on the set. 3. Receive dot signal pattern. (PICTURE and BRIGHT to minimum) 4. Check that the HV static voltmeter is reading 31.00±1.0kVdc. **HV Regulation adjustment** 1. Connect a HV static voltmeter to the unconnected plug of the high-voltage block. 2. Power on the set. 3. Receive dot signal pattern. (PICTURE and BRIGHT to minimum) 4. If anode voltage is 32kV or higher, replace C514 of 390PF/2kV with that of 680PF/2kV, and check if the voltage is within the standard range. 5. If anode voltage is 30kV or lower, replace C514 of 390PF/2kV with that of 100PF/2kV, and check if the voltage is within the standard range.		◪ marked parts C514, C516, C515, T502 (PMT), T503 (HLT), T504 (FBT), DEFLECTION YOKE, IC651	⊠ C514	 G BOARD -COMPONENT SIDE- 

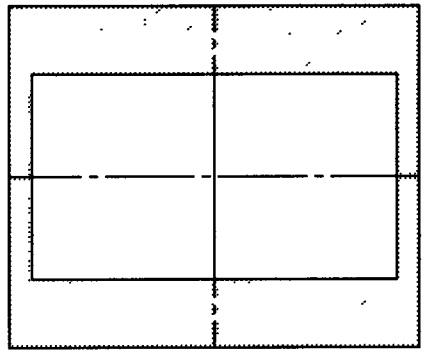
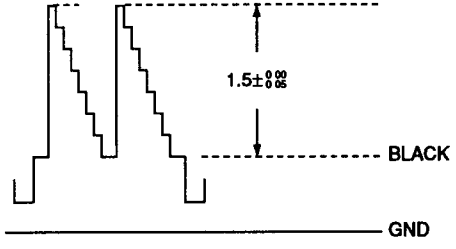
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
[G BOARD] **HV HOLD DOWN CIRCUIT OPERATION CHECK AND ADJUSTMENT (☒ R514, R561)** When replacing the following components marked with ◪ on the schematic diagram, always check hold-down voltage and if necessary re-adjust. **OPERATION CHECK** 1. Remove CN651 connecter. 2. Short-circuit across TP-PROT (R692) and ground. 3. Connect a HV static voltmeter to the unconnected plug of the high-voltage block. 4. Connect a 220k variable resistor, across pin ③ and pin ⑤ of IC651 set to maximum value. 5. Power on the set. 6. Receive dot signal pattern. (PICTURE and BRIGHT to minimum) 7. Gradually lower the value of the variable resistor and check that the hold-down circuit operates at a static voltmeter reading of 33.5±1.0kVdc when the raster disappears. **HV HOLD-DOWN ADJUSTMENT** 1. Repeat steps ① ~ ⑦ as above. 2. If hold down voltage is 34.5kV or higher, remove R514, mount a resistor (390kΩ, 1/4W : RN) onto R561 instead, and check again if the hold-down voltage is within the standard range. 3. If hold-down voltage is 32.5kV or lower, mount a resistor (220kΩ, 1/4W : RN) onto R561, and check again if the hold-down voltage is within the standard range. **NOTE :** Please finish the adjustment as soon as possible.		◪ marked parts R502, R514, R516, R517, R539, R560, R561, C507, C513, D501, D504, D507, IC301, IC501, IC651, T502 (PMT), T503 (HLT), T504(FBT) DEFLECTION YOKE	☒ R514, 561	G BOARD -COMPONENT SIDE- 

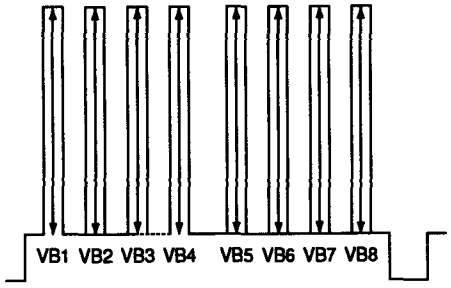
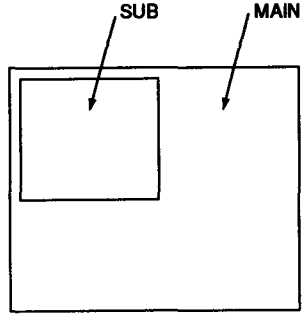
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
[G BOARD] **+B MAX VOLTAGE CONFIRMATION** The following adjustments should always be performed when replacing IC651. 1. Supply 130VAC to variable autotransformer. 2. Input dot signal. 3. Set the PICTURE control and the BRIGHTNESS controls to minimum. 4. Confirm if the voltage of G BOARD TP135V is less than 137.0 Vdc. 5. If step 4 is not satisfied, replace IC651 and repeat above steps. **+B OVP CONFIRMATION** 1. Remove CN651 connector. 2. Connect a voltmeter to TP135V, and TP (PROT) and ground. 3. Connect a 220kΩ variable resistor, across pin ③ and pin ⑤ of IC651, and set to maximum value. 4. Supply 120VAC to variable autotransformer. 5. Set PICTURE and the BRIGHTNESS controls to minimum. 6. Gradually turn the 220kΩ variable register, and check if OVP works properly when the voltage of TP135V is between 139.0~151.5V.				

SECTION 5
CIRCUIT ADJUSTMENT

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
RF AGC 1. Input a color-bar signal. 2. Adjust AGC VR of TU1101 so that snow, noise, and cross-modulation disapper from the picture. 3. Verify picture quality on each channel.				
BER DISPLAY ADJUSTMENT (DISP) 1. Receive cross-hatch signal. 2. Set to Service mode. 3. Select "DISP", and adjust so that the blank spaces on the both sides of picture bar become equal. 4. Write the data into memory. MUTING→ENTER				
SUB-CONTRAST ADJUSTMENT (SCON) 1. Receive the color-bar signal. 2. PICTURE : maximum COLOR : minimum BRIGHTNESS : minimum RON---1 GON---0 BON---0 3. Set to service mode. 4. Connect an oscilloscope between ⑥ pin of CN004 (A Board) and ground. 5. Select "SCON" and adjust so that the wave from level is 1.65±0.1Vp-p. 6. Write the data into memory MUTING→ENTER				

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
SUB-HUE AND SUB-COLOR ADJUSTMENT (SHUE, SCOL) 1. Receive color-ber signal. 2. PICTURE : maximum COLOR : minimum BRIGHTNESS : minimum 3. Set to Service mode. 4. Connect an oscilloscope between ⑦ pin of CN004 (A Board) connecter and ground. 5. Select "SHUE" and "SCOL", and adjust them to have VB1=VB4 and VB2=VB3 in the waveform levels. 6. Raise SCOL data 1 steps higher. 7. Write the data into memory. MUTING→ENTER				
P IN P ACQUISITION AREA ADJUSTMENT (MAHP, MAVP, SAHP, SAVP) 1. Receive monoscope pattern signal. 2. Set to P IN P (□■) mode, and to Service mode. 3. Check the MAIN/SUB PICTURE position. 4. Select "MAHP", "MAVP" and "SAHP", "SAVP" and adjust H/V position to the specified level. 5. Write the data into memory. MUTING→ENTER				 H : A=B (sq) V : C=D (sq)

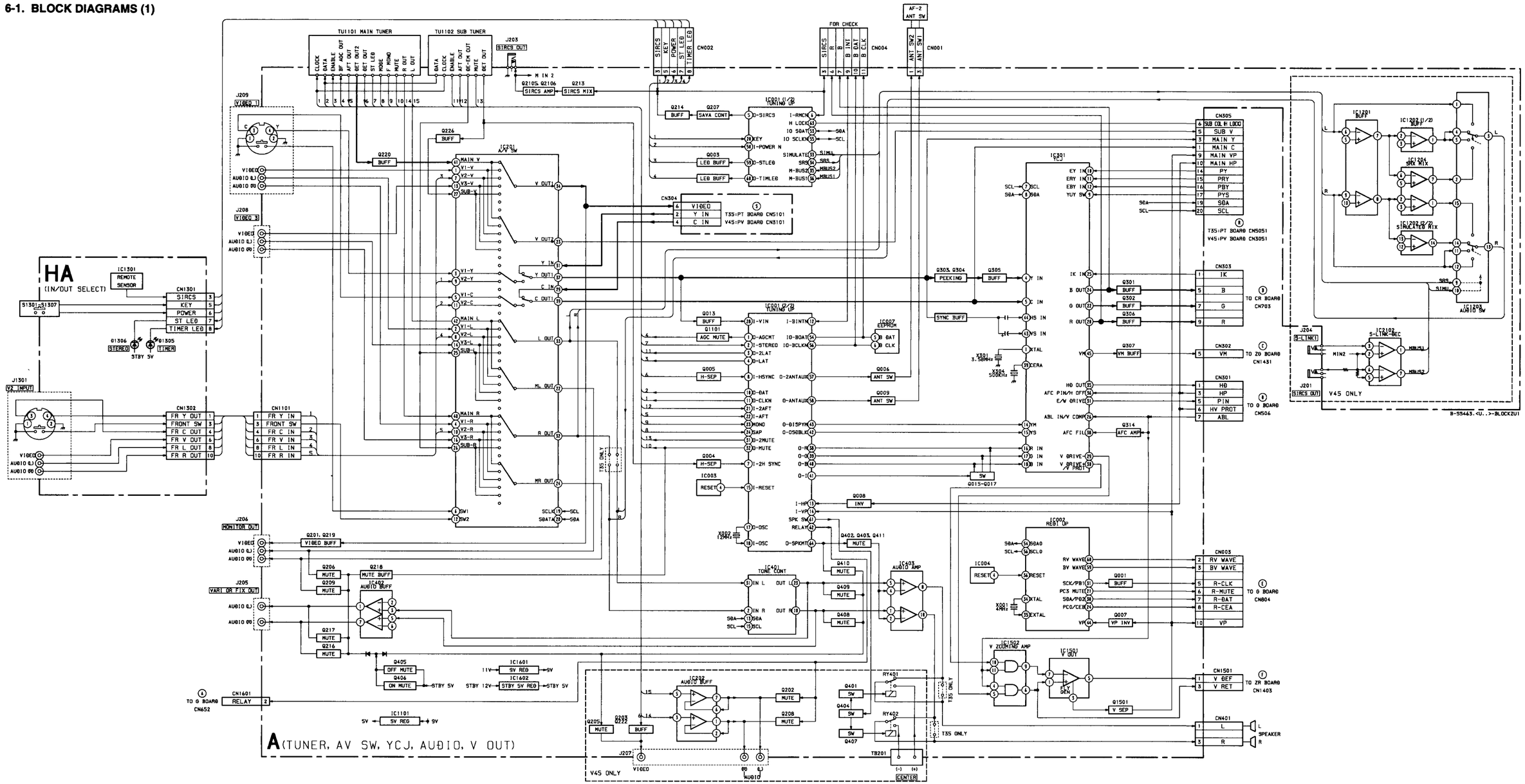
ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
P IN P POSITION ADJUSTMENT (BGHP, BGVP) 1. Receive monoscope pattern signal. 2. Set to P IN P (◨) mode, and to Service mode. 3. Check the SUB PICTURE position. 4. Select "BGHP" and "BGVP" and adjust H/V position to the center level. 5. Write the data into memory MUTING→ENTER				
P IN P SUB CONTRAST ADJUSTMENT (MSCN, SSCN) 1. Receive color-bar signal. 2. PICTURE : maximum COLOR : minimum BRIGHTNESS : minimum 3. Set to Service mode. 4. Connect an oscilloscope between ⑨ pin CN303 (A Board) and ground. 5. Select "MSCN" and "SSCN" adjust so that waveform level is $1.5^{+0.05}_{-0.00}$ Vp-p. 6. Write the data into memory. MUTING→ENTER				

ADJUSTMENT ITEM AND PROCEDURE	EQUIPMENT AND SIGNAL	MEASUREMENT POSITION	ADJUSTMENT LOCATION	ILLUSTRATION AND SHAPE AND NUMBER
P IN P SUB HUE, SUB COLOR ADJUSTMENT 1. Receive the color-bar signal. 2. PICTURE : maximum COLOR : center BRIGHTNESS : center 3. Set to Service mode. 4. Connect an oscilloscope between ⑤ pin of CN303 (A Board) and ground. 5. Select "MSHU", "SSHU" (SUB HUE) and "MSCL", SSCL (SUB COLOR), adjust them to have VB2=VB3, VB6=VB7 and VB1=VB4, VB5=VB8 in the waveform levels. 6. Raise "ICOL" data 1 steps higher. 7. Write the data into memory. MUTING→ENTER				
P IN P WHITE BALANCE ADJUSTMENT (MUPD, MVPD, SUPD, SVPD) 1. Receive the white pattern signal. 2. Set to P IN P (⧉) mode, and to Service mode. 3. Adjust the MAIN PICTURE with "MUPD" and "MVPD" for the best white balance. 4. Adjust the SUB PICTURE white balance level with "MUPD" and "MVPD" to get the same level as the MAIN PICTURE.				

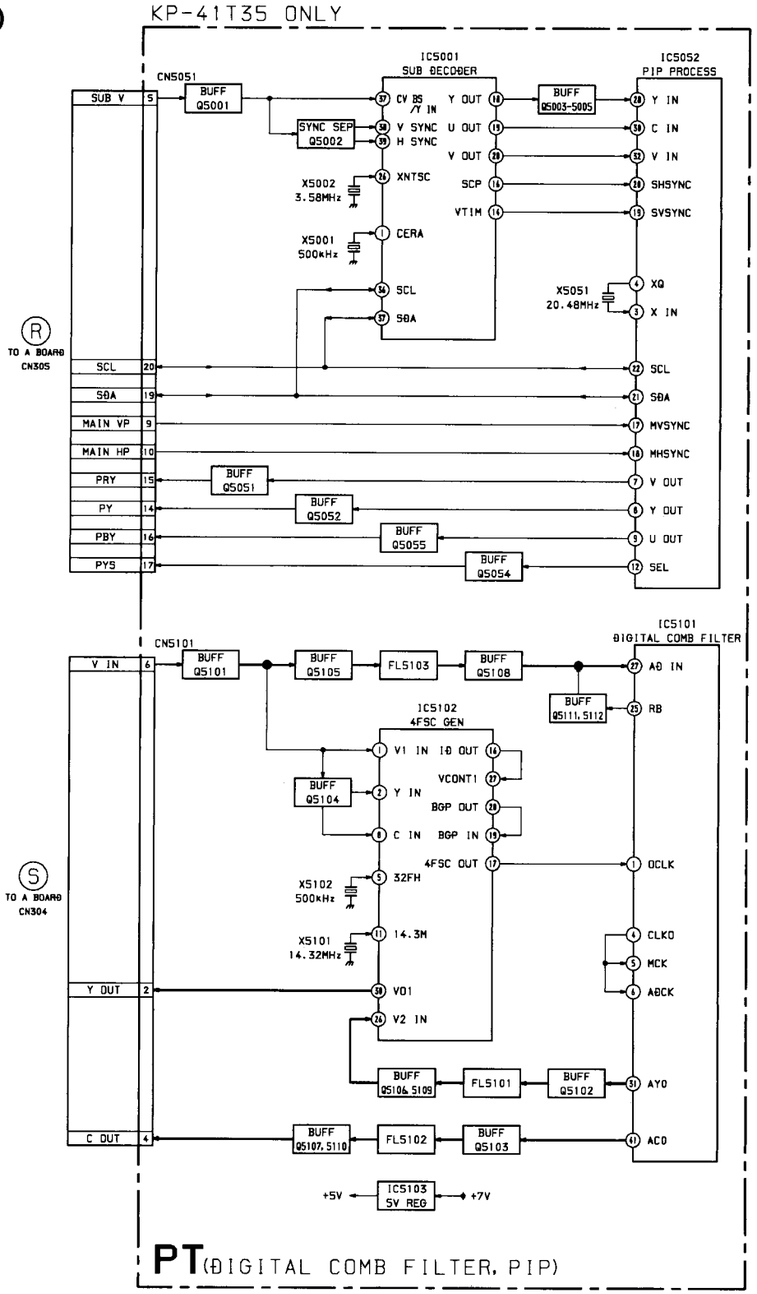
MEMO

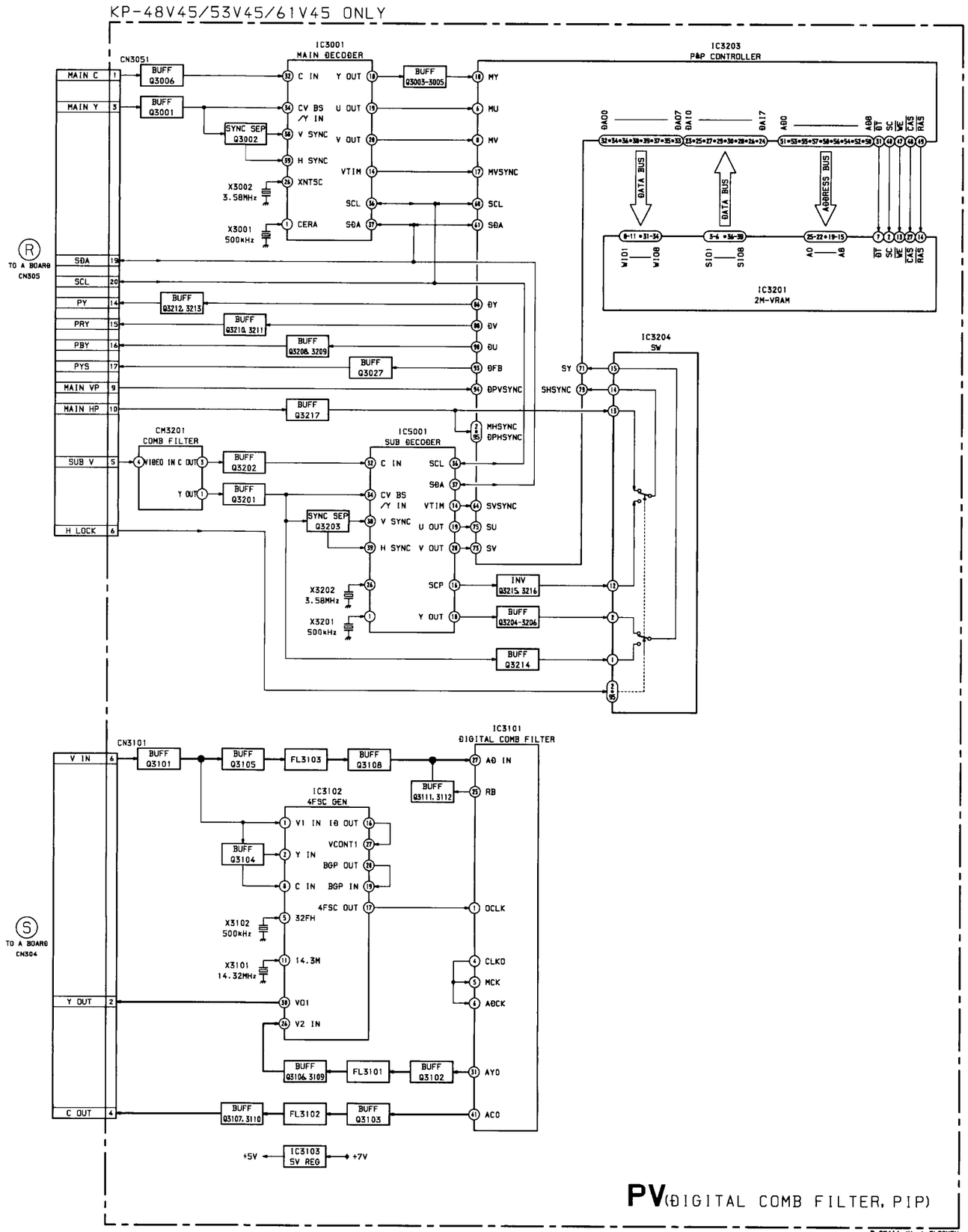
SECTION 6
DIAGRAMS

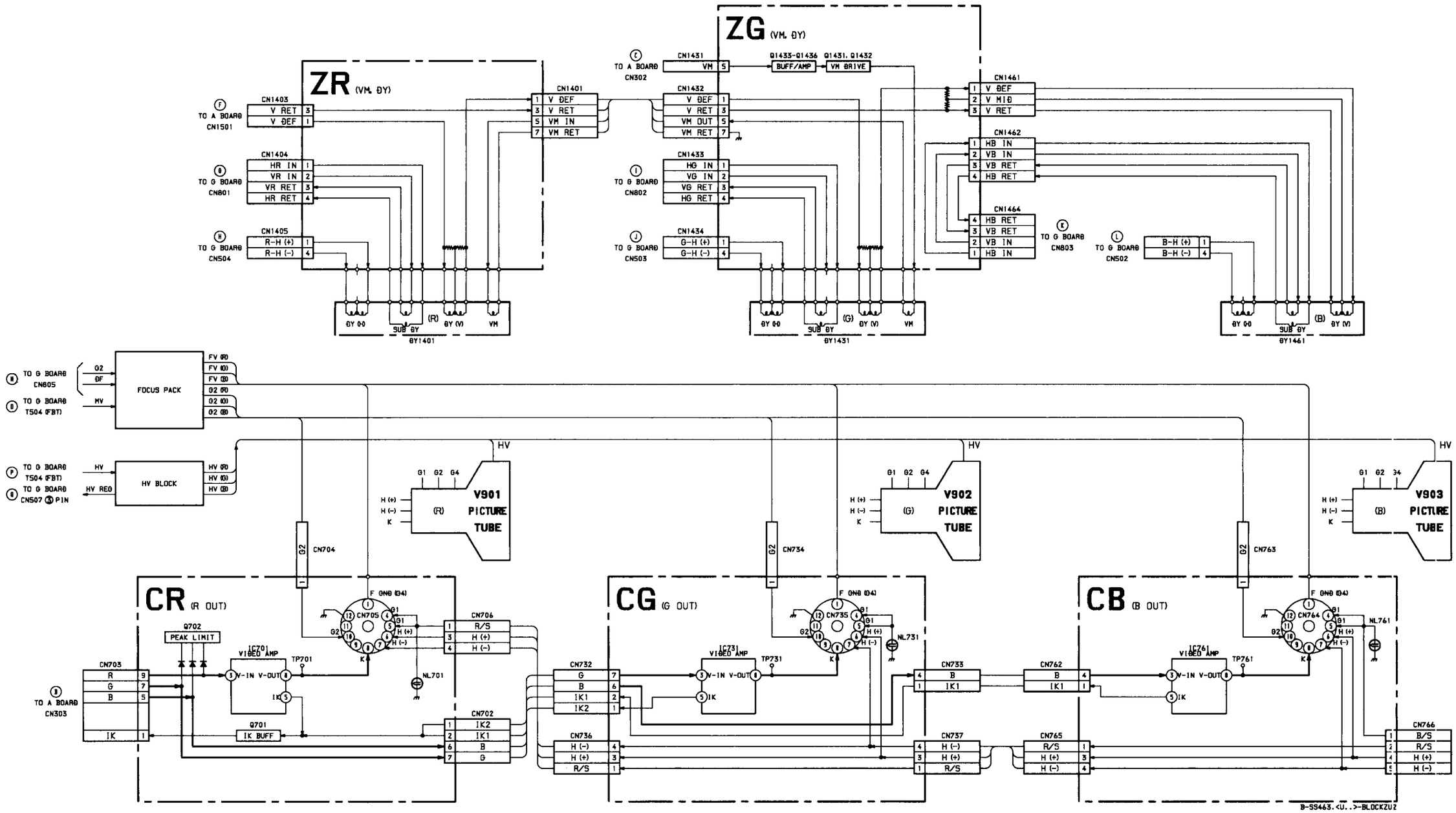
6-1. BLOCK DIAGRAMS (1)

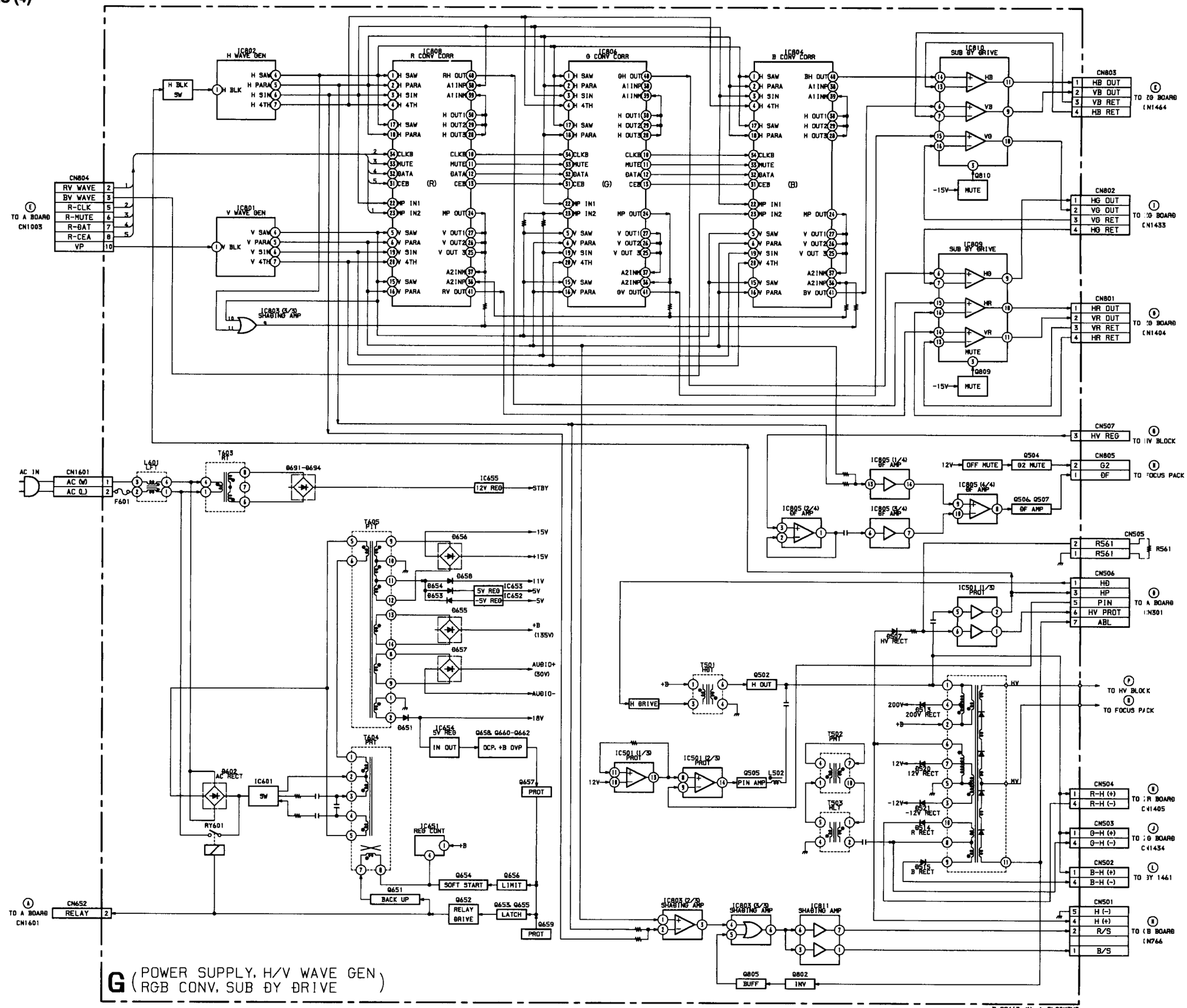


BLOCK DIAGRAMS (2)

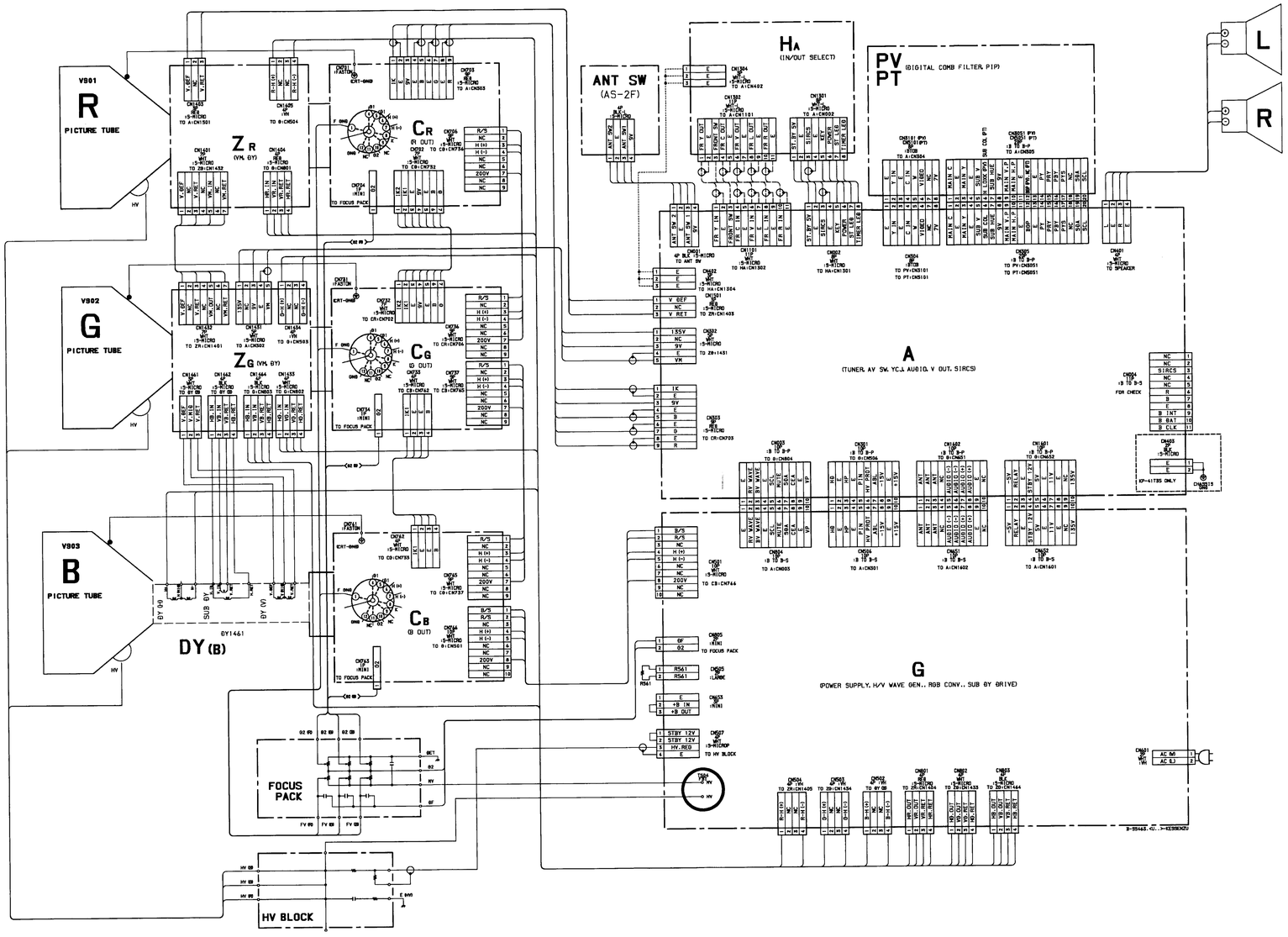




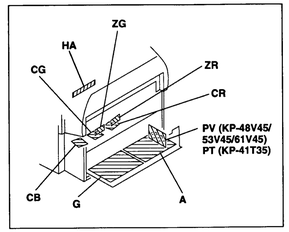

ZR (VM, ΘY)
ZG (VM, ΘY)
CN1403
V RET 3
V ΘEF 1
CN1404
HR IN 1
VR IN 2
VR RET 3
HR RET 4
CN1405
R-H (+) 1
R-H (-) 4
CN1401
1 V ΘEF
3 V RET
5 VM IN
7 VM RET
CN1431
VM 5
CN1432
V ΘEF 1
V RET 3
VM OUT 5
VM RET 7
CN1433
HG IN 1
VG IN 2
VG RET 3
HG RET 4
CN1434
G-H (+) 1
G-H (-) 4
Q1433-Q1436 BUFF/AMP
Q1431, Q1432 VM DRIVE
CN1461
1 V ΘEF
2 V MIΘ
3 V RET
CN1462
1 HB IN
2 VB IN
3 VB RET
4 HB RET
CN1464
4 HB RET
3 VB RET
2 VB IN
1 HB IN
TO A BOARΘ CN1501
TO G BOARΘ CN801
TO G BOARΘ CN504
TO A BOARΘ CN302
TO G BOARΘ CN802
TO G BOARΘ CN503
TO G BOARΘ CN803
TO G BOARΘ CN502
B-H (+) 1
B-H (-) 4
ΘY 0-0
SUB ΘY
ΘY1401
ΘY1431
ΘY1461
(R)
(G)
(B)
ΘY (V)
VM
TO G BOARΘ CN805
TO G BOARΘ T504 (FBT)
G2
ΘF
MV
FOCUS PACK
FV (R)
FV (G)
FV (B)
G2 (R)
G2 (G)
G2 (B)
HV
HV REG
HV BLOCK
HV (R)
HV (G)
HV (B)
TO G BOARΘ CN507 3 PIN
G1 G2 G4
G1 G2 34
H (+)
H (-)
K
V901 PICTURE TUBE
V902 PICTURE TUBE
V903 PICTURE TUBE
CN704
CN734
CN763
CR (R OUT)
CG (G OUT)
CB (B OUT)
F GNB (34)
CN705
CN735
CN764
Q702
PEAK LIMIT
Q701
IK BUFF
IC701 VIΘΕΟ AMP
IC731 VIΘΕΟ AMP
IC761 VIΘΕΟ AMP
V-IN V-OUT
IK
TP701
TP731
TP761
NL701
NL731
NL761
CN703
R 9
G 7
B 5
IK 1
TO A BOARΘ CN303
CN706
1 R/S
3 H (+)
4 H (-)
CN702
1 IK2
2 IK1
6 B
7 G
CN732
G 7
B 6
IK1 2
IK2 1
CN736
H (-) 4
H (+) 3
R/S 1
CN733
4 B
1 IK1
CN737
4 H (-)
3 H (+)
1 R/S
CN762
B 4
IK1 1
CN765
R/S 1
H (+) 3
H (-) 4
CN766
1 B/S
2 R/S
4 H (+)
5 H (-)
TO G BOARΘ CN501
B-SS463.<U..>-BLOCKZU2


G (POWER SUPPLY, H/V WAVE GEN
RGB CONV, SUB DY DRIVE)
IC802 H WAVE GEN
IC801 V WAVE GEN
IC808 R CONV CORR
IC806 G CONV CORR
IC804 B CONV CORR
IC810 SUB DY DRIVE
IC809 SUB DY DRIVE
IC803 (3/3) SHADING AMP
CN804
RV WAVE
BV WAVE
R-CLK
R-MUTE
R-BAT
R-CEA
VP
TO A BOARD CN1003
H BLK SW
CN803
HB OUT
VB OUT
VB RET
HB RET
TO I2B BOARD CN1464
CN802
HG OUT
VG OUT
VG RET
HG RET
TO I2G BOARD CN1433
CN801
HR OUT
VR OUT
VR RET
HR RET
TO I2R BOARD CN1404
Q810
Q809
MUTE
-15V
CN507
HV REG
TO INV BLOCK
CN805
G2
BF
TO FOCUS PACK
AC IN
CN1601
AC (W)
AC (L)
F601
L601 LPF
T603 PRT
D691-D694
IC655 12V REG
STBY
T605 PRT
D656
D658
D654
D653
IC653 5V REG
IC652 -5V REG
D655
D657
D651
15V
+15V
11V
5V
-5V
+B (135V)
AUDIO+ (30V)
AUDIO-
18V
T604 PRT
IC454 5V REG
IN OUT
Q658, Q660-Q662
OCP, +B OVP
Q657
PROT
D602 AC RECT
IC601 SW
RY601
IC451 REG CONT
+B
Q654 SOFT START
Q656 LIMIT
Q651 BACK UP
Q652 RELAY DRIVE
Q653, Q655 LATCH
Q659
PROT
CN652
RELAY
TO A BOARD CN1601
IC805 (1/4) BF AMP
IC805 (2/4) BF AMP
IC805 (3/4) BF AMP
IC805 (4/4) BF AMP
12V
OFF MUTE
Q504 B2 MUTE
Q506, Q507 BF AMP
CN505
R561
R561
CN506
HD
HP
PIN
HV PROT
ABL
TO A BOARD CN301
IC501 (1/3) PRO1
D507 HV RECT
T501 HOT
+B
H DRIVE
Q502 H OUT
HV
TO HV BLOCK
TO FOCUS PACK
200V
D513 200V RECT
IC501 (1/3) PRO1
IC501 (2/3) PROT
12V
Q505 PIN AMP
L502
T502 PRT
T503 HLT
D520 12V RECT
-12V
D521 -12V RECT
D514 R RECT
D515 B RECT
CN504
R-H (+)
R-H (-)
TO I2R BOARD CN1405
CN503
G-H (+)
G-H (-)
TO I2G BOARD CN1434
CN502
B-H (+)
B-H (-)
TO CRT 1461
CN501
H (-)
H (+)
R/S
B/S
TO I2B BOARD CN766
IC803 (2/3) SHADING AMP
IC803 (3/3) SHADING AMP
IC811 SHADING AMP
Q805 BUFF
Q802 INV
B-5S463-<U..>-BLOCK2U3

6-2. FRAME SCHEMATIC DIAGRAM



6-3. CIRCUIT BOARDS LOCATION



6-4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF
  Capacitors without voltage indication are all 50V.
- All resistors are in ohms.
  kΩ = 1000Ω, MΩ = 1000kΩ
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power: 1/4W
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth-chassis.
- The components identified by ⊞ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪, make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ⊞ and repeat the adjustment until the specified value is achieved.
  (Refer to R514, R561 and C514 adjustment on Page 51 to 53.)
- When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)	Adjustment (⊞)
C514, C515, C516, IC651, T502, T503, T504, DY	HV Regulator (C514)
C507, C513, D501, D504, D507, IC301, IC501, IC651, R502, R514, R516, R517, R539, R560, R561, T502, T503, T504, DY	HV HOLD-DOWN (R514, R561)

- As to the voltage value shown by the semiconductors on the Schematic Diagram, see the another list.
- Readings are taken with a color-bar signal input.
- Readings are taken with a 10MΩ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- ✱ : Measurement impossibility.
- Circled numbers are waveform reference.
- : B + line.
- : B − line.
- : signal path. (RF)

Note: The symbol ⊞ display is on the component side.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

The symbol ⊞ indicate fast operating fuse. Replace only with fuse of same rating as marked.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Le symbole ⊞ indique une fusible a action rapide. Doit etre remplacee par une fusible de meme valeur, comme maque.

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFRAMMABLE CARBON
	: FUSE	NONFRAMMABLE FUSIBLE
	: RW	NONFRAMMABLE WIREWOUND
	: RS	NONFRAMMABLE METAL OXIDE
	: RB	NONFRAMMABLE CEMENT
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Terminal name of semiconductors in silk screen printed circuit (✱)

	Device	Printed symbol	Terminal name	Circuit
①	Transistor	T	Collector / Base / Emitter	
②	Transistor	—	Collector / Base / Emitter	
③	Diode	⊢	Cathode / Anode	
④	Diode	T	Cathode / Anode (NC)	
⑤	Diode	—	Cathode / Anode (NC)	
⑥	Diode	T	Common / Anode / Cathode	
⑦	Diode	—	Common / Anode Cathode	
⑧	Diode	T	Common / Anode / Anode	
⑨	Diode	—	Common / Anode Anode	
⑩	Diode	T	Common / Cathode / Cathode	
⑪	Diode	—	Common / Cathode Cathode	
⑫	Transistor (FET)	┃	Drain / Gate / Source	
⑬	Transistor (FET)	┣	Drain / Gate / Source	
⑭	Transistor (FET)	┃	Source / Drain / Gate	
⑮	Transistor	┃	Emitter / Collector / Base	
⑯	Transistor	⊣⊢	C1B1E1 2SA1837	
⑰	Transistor	⊣⊢	C1B2E2 2SA1015	
⑱	Transistor	—	C1 B2 E2 E1 B1 C2	
⑲	Transistor	—	C1 B2 E2 E1 B1 C2	
⑳	Transistor	—	E2 B1 E1 C2 B2 C1	
㉑	Transistor	—	B2 E1 B1 C1 E2 C2	
㉒	Transistor	—	E2 B1 B2 C2 E1 C1	
—	Discrete semiconductor			

(Chip semiconductors that are not actually used are included.)

A (1/2) BOARD

REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE
IC001	①	0	IC001	⑯	4.7	IC201	①	4.2	IC301	⑯	6.4	IC401	①	1.8
	②	0		⑰	8.8		②	4.8		⑰	6.1		②	1.8
	③	0		⑱	0		③	4.7		⑱	6.1		③	0
	④	0		⑲	3.7		④	5.0		⑲	GND		④	0
	⑤	0		⑳	0		⑤	4.2		⑳	0		⑤	4.4
	⑥	4.8		㉑	0		⑥	5.0		㉑	0		⑥	4.5
	⑦	0		㉒	4.1		⑦	4.2		㉒	5.0		⑦	4.4
	⑧	0		㉓	0		⑧	4.8		㉓	5.0		⑧	4.4
	⑨	4.4		㉔	4.9		⑨	4.7		㉔	5.0		⑨	4.4
	⑩	0		㉕	4.9		⑩	4.8		㉕	6.7		⑩	4.4
	⑪	0		㉖	4.7		⑪	4.2		㉖	0.9		⑪	4.4
	⑫	4.9		㉗	0		⑫	GND		㉗	6.5		⑫	4.4
	⑬	4.3		㉘	0		⑬	GND		㉘	0.8		⑬	5.1
	⑭	0		㉙	GND		⑭	GND		㉙	6.7		⑭	4.4
	⑮	4.9		㉚	2.4		⑮	GND		㉚	0.8		⑮	4.4
	⑯	GND		㉛	2.1		⑯	4.8		㉛	4.1		⑯	4.4
	⑰	2.4		㉜	4.3		⑰	4.8		㉜	1.5	IC402	①	GND
	⑱	2.1		㉝	GND		⑱	4.8		㉝	5.4		②	4.4
	⑲	0		㉞	GND		⑲	GND		㉞	0.6		③	4.4
	⑳	4.9		㉟	GND		⑳	4.2		㉟	2.9		④	4.4
	㉑	2.3		㊱	GND		㉑	4.2		㊱	3.0		⑤	9.0
	㉒	2.4		㊲	GND		㉒	4.2		㊲	3.0		⑥	1.4
	㉓	0	IC002	①	4.6		㉓	4.2		㊳	4.2		⑦	3.0
	㉔	GND		②	GND		㉔	8.2		㊴	4.8		⑧	15.3
	㉕	1.8		③	GND		㉕	4.8		㊵	8.7		⑨	3.1
	㉖	2.6		④	GND		㉖	GND		㊶	3.4	IC403	①	1.4
	㉗	4.8		⑤	4.8		㉗	5.7		㊷	4.8		②	0
	㉘	2.2		⑥	4.8		㉘	4.3		㊸	4.1		③	0.2
	㉙	5.0		⑦	4.2		㉙	4.2		㊹	4.2		④	29.2
	㉚	1.9		⑧	2.8		㉚	5.1		㊺	2.3		⑤	0.1
	㉛	2.2		⑨	2.2		㉛	GND		㊻	GND		⑥	GND
	㉜	0		⑩	2.2		㉜	4.3		㊼	2.6		⑦	1.2
	㉝	0		⑪	GND		㉝	4.4		㊽	2.7		⑧	14.4
	㉞	0		⑫	GND		㉞	GND		㊾	3.9		⑨	-14.0
	㉟	0		⑬	4.9		㉟	3.5		㊿	3.0	IC1501	①	-15.4
	㊱	0		⑭	4.9		㊱	4.2		(51)	4.2		②	0.8
	㊲	GND	IC003	①	GND		㊲	5.2		(52)	0.3		③	14.5
	㊳	0		②	4.8		㊳	4.2		(53)	4.8		④	1.2
	㊴	0		③	5.0		㊴	4.5		(54)	GND		⑤	-0.3
	㊵	5.0		④	4.5		㊵	4.5		(55)	GND		⑥	0
	㊶	0		⑤	GND		㊶	GND		(56)	4.4		⑦	0
	㊷	0	IC004	①	GND	IC202	①	GND		(57)	4.4	IC1502	①	GND
	㊸	0		②	4.8		②	4.6		(58)	4.4		②	0
	㊹	2.7		③	4.9		③	4.5		(59)	4.4		③	-0.3
	㊺	0		④	GND		④	4.5		(60)	4.4		④	4.9	
	㊻	4.9		⑤	GND		⑤	8.9		(61)	4.4		⑤	-5.1
	㊼	4.9		⑥	GND		⑥	4.5	IC401	①	4.4		⑥	10.9
	㊽	GND	IC007	①	GND		⑦	5.6		②	3.9	IC1601	①	GND
	㊾	GND		②	4.8		⑧	3.9		③	9.0		②	9.0
	㊿	4.7		③	4.8		⑨	4.4		④	3.8		③	GND
	(51)	0		④	GND	IC301	①	3.5		⑤	4.8	IC1602	①	11.9
	(52)	4.7		⑤	5.0		②	4.9		⑥	GND		②	GND
	(53)	4.7	IC201	①	4.9		③	4.8		⑦	4.8		③	5.0
	(54)	4.7		②	4.9		④	0		⑧	3.9			

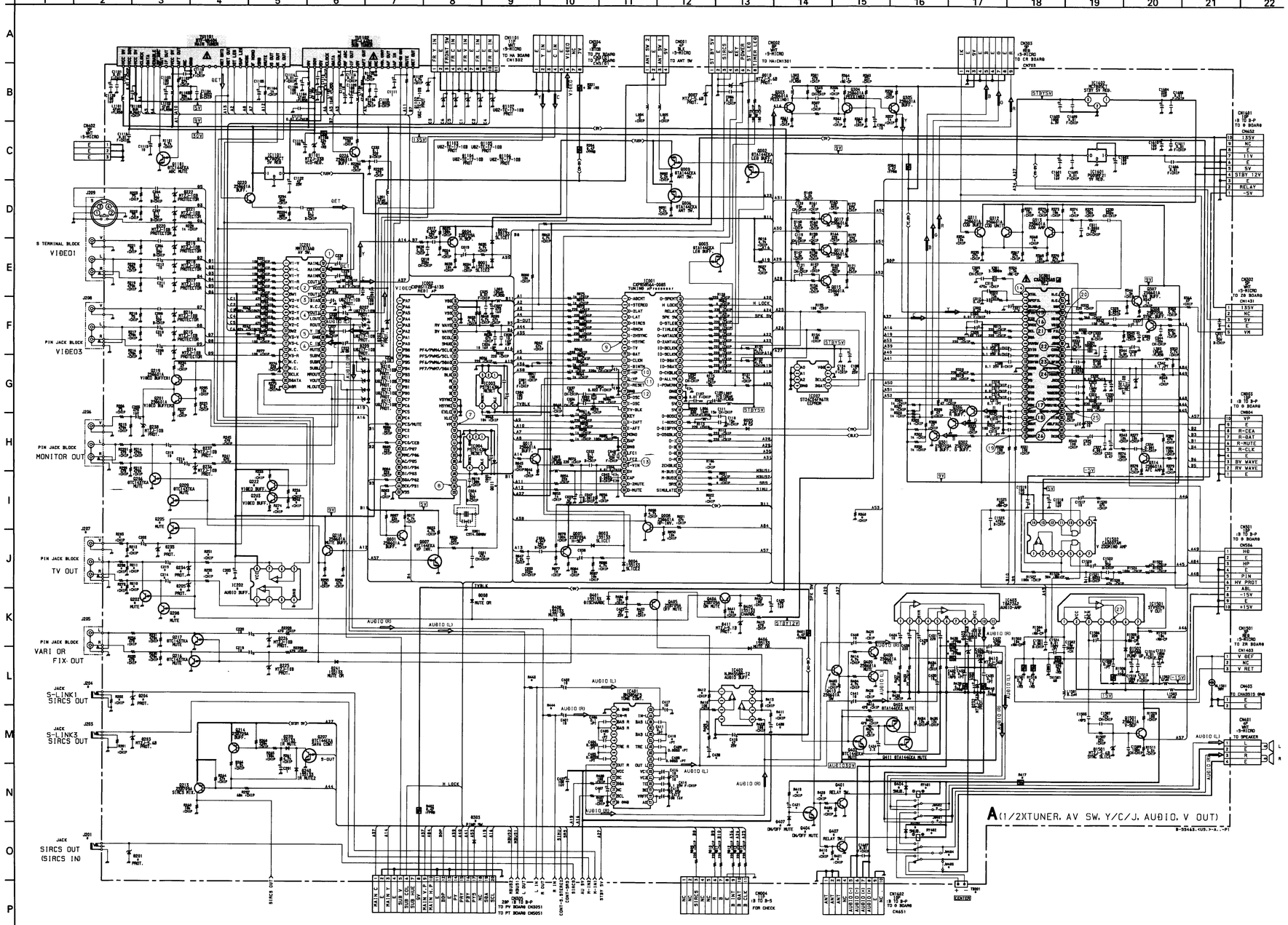
A (1/2) BOARD

REF.		VOLTAGE	REF.		VOLTAGE	REF.		VOLTAGE	REF.		VOLTAGE
Q001	E	GND	Q208	E	GND	Q311	E	5.1
	C	4.8		C	0.1		C	8.8
	B	0		B	-0.1		B	4.2
Q002	E	GND	Q209	E	GND	Q312	E	5.1
	C	GND		C	0		C	8.8
	B	0		B	0		B	3.7
Q003	E	3.8	Q210	E	5.0	Q313	E	4.8
	C	GND		C	0.3		C	7.7
	B	3.8		B	4.9		B	5.3
Q004	E	4.9	Q214	E	5.0	Q314	E	0.9
	C	1.0		C	4.9		C	4.5
	B	5.4		B	5.0		B	1.5
Q005	E	4.9	Q216	E	GND	Q401	E	GND
	C	0.7		C	0		C	14.6
	B	4.9		B	0		B	0
Q006	E	8.9	Q217	E	GND	Q402	E	4.4
	C	0		C	0		C	0
	B	8.8		B	0		B	3.8
Q007	E	GND	Q218	E	8.9	Q403	E	26.3
	C	4.8		C	4.8		C	26.2
	B	0.1		B	0		B	13.2
Q008	E	GND	Q219	E	4.5	Q404	E	GND
	C	4.3		C	8.2		C	0
	B	0.1		B	5.1		B	0.1
Q009	E	5.3	Q220	E	4.1	Q405	E	11.9
	C	4.8		C	9.0		C	-1.3
	B	0		B	4.8		B	11.8
Q013	E	3.7	Q227	E	3.7	Q406	E	11.8
	C	5.0		C	8.2		C	-1.3
	B	4.3		B	4.3		B	11.9
Q015	E	GND	Q228	E	4.4	Q407	E	GND
	C	0		C	8.4		C	14.6
	B	-0.2		B	5.1		B	0
Q016	E	GND	Q301	E	1.5	Q408	E	GND
	C	0		C	GND		C	0
	B	-0.2		B	0.9		B	3.8
Q017	E	GND	Q302	E	1.5	Q409	E	GND
	C	0		C	GND		C	0
	B	-0.2		B	0.9		B	3.8
Q201	E	0.8	Q303	E	3.8	Q410	E	3.6
	C	4.5		C	8.8		C	4.9
	B	1.5		B	4.4		B	3.8
Q202	E	GND	Q304	E	3.5	Q411	E	26.3
	C	0.1		C	8.6		C	26.2
	B	-0.1		B	2.9		B	13.2
Q203	E	0.8	Q305	E	5.9	Q1101	E	GND
	C	3.7		C	8.2		C	4.4
	B	1.5		B	6.6		B	0
Q205	E	GND	Q306	E	1.6	Q1501	E	0.1
	C	1.5		C	GND		C	14.4
	B	0		B	0.9		B	-0.4
Q206	E	GND	Q307	E	4.3			
	C	0		C	8.8			
	B	0		B	5.0			
Q207	E	GND	Q308	E	5.1			
	C	5.3		C	GND			
	B	0		B	4.5			

A (1/2) BOARD

① 1.4Vp-p (H)	② 2.2Vp-p (H)	③ 2.2Vp-p (H)
④ 2.2Vp-p (H)	⑤ 2.2Vp-p (H)	⑥ 2.2Vp-p (H)
⑦ 5.0Vp-p (V)	⑧ 5.4Vp-p (4MHz)	⑨ 4.0Vp-p (H)
⑩ 5.0Vp-p (H)	⑪ 5.0Vp-p (V)	⑫ 3.4Vp-p (12MHz)
⑬ 2.0Vp-p (H)	⑭ 0.14Vp-p (3.58MHz)	⑮ 2.0Vp-p (H)
⑯ 2.0Vp-p (H)	⑰ 2.4Vp-p (H)	⑱ 2.4Vp-p (H)
⑲ 2.4Vp-p (H)	⑳ 2.0Vp-p (H)	㉑ 2.0Vp-p (H)
㉒ 0.13Vp-p (500kHz)	㉓ 4.8Vp-p (H)	㉔ 6.0Vp-p (H)
㉕ 1.3Vp-p (V)	㉖ 1.3Vp-p (V)	㉗ 60Vp-p (V)

Schematic diagram
A(1/2) board ➡



A(1/2) BOARD * MARK LIST

	KP-41T35	KP-48V45/53V45/ 61V45		KP-41T35	KP-48V45/53V45/ 61V45		KP-41T35	KP-48V45/53V45/ 61V45
C202	#	470 16V	JW404	5MM	#	R274	#	56 :CHIP
C205	#	10	Q202	#	DTC143TKA	R298	#	470 :CHIP
C214	#	10	Q203	#	2SD601A	R306	470 :CHIP	100 :CHIP
C215	#	10	Q205	#	DTC143TKA	R321	JW (7.5)	3.3 3W :RS
C406	0.022 :PT	0.1 :PT	Q208	#	DTC143TKA	R380	4.7k :CHIP	#
C410	0.022 :PT	0.1 :PT	Q222	#	2SD601A	R405	#	10k :CHIP
C421	#	4.7	Q401	#	2SD601A	R409	#	8.2k :CHIP
C438	#	10	Q404	#	DTC144EKA	R410	#	1k :CHIP
C439	#	10	Q407	#	2SD601A	R411	#	8.2k :CHIP
CN403	2P BLK :S-MICRO	#	R001	#	220 :CHIP	R412	100 :CHIP	10k :CHIP
D008	#	1SS133	R002	#	220 :CHIP	R413	100 :CHIP	10k :CHIP
D011	MTZJ-5.6B	#	R022	#	220 :CHIP	R417	#	56 :FPRD
D201	#	MTZJ-5.6	R029	#	220 :CHIP	R419	#	39k :CHIP
D204	#	MTZJ-5.6	R062	#	220 :CHIP	R420	#	1k :CHIP
D205	#	MTZJ-10	R106	#	220 :CHIP	R421	#	10k :CHIP
D234	#	MTZJ-10	R126	#	220 :CHIP	R427	1.2k :CHIP	22k :CHIP
D235	#	MTZJ-10	R201	#	1k :CHIP	R428	1k :CHIP	220 :CHIP
D303	1SS133	JW (6)	R202	#	1k :CHIP	R429	1k :CHIP	220 :CHIP
D404	#	1SS133	R203	#	75 :CHIP	R430	1.2k :CHIP	22k :CHIP
D407	#	1SS133	R210	#	470k :CHIP	R437	1.2k :FPRD	1.8k :FPRD
D409	#	1SS133	R211	#	470k :CHIP	R438	1.2k :FPRD	1.8k :FPRD
IC202	#	NJM4558M	R212	#	470 :CHIP	R443	0 :CHIP	#
J201	#	JACK (SIRCS)	R226	#	10k :CHIP	R444	0 :CHIP	#
J204	#	JACK (SIRCS)	R228	#	47 :CHIP	RY401	#	DS2Y-S-DC5 V
J207	#	JACK (TV OUT)	R246	#	2.2k :CHIP	RY402	#	DS2Y-S-DC5 V
JW401	5MM	#	R250	#	470 :CHIP	TB201	#	TERMINAL PUSH
JW402	5MM	#	R251	#	470 :CHIP			# Mark : not mounted
JW403	5MM	#	R273	#	470 :CHIP			

A(2/2) BOARD * MARK LIST

	KP-41T35	KP-48V45/53V45/ 61V45		KP-41T35	KP-48V45/53V45/ 61V45		KP-41T35	KP-48V45/53V45/ 61V45
C1201	#	0.001 B :CHIP	R1206	#	22k :CHIP	R1236	#	22k :CHIP
C1202	#	10	R1207	#	22k :CHIP	R1237	#	1.5k :CHIP
C1203	#	10	R1208	#	22k :CHIP	R1239	#	100k :CHIP
C1204	#	0.0033 :PT	R1209	#	47k :CHIP	R1240	#	100k :CHIP
C1205	#	0.47	R1210	#	120k :CHIP	R1241	#	100k :CHIP
C1206	#	0.1 25V F :CHIP	R1211	#	15k :CHIP	R1242	#	47k :CHIP
C1207	#	10	R1212	#	47k :CHIP	R1245	#	3.9k :CHIP
C1208	#	100 16V	R1213	#	10k :CHIP	R1246	#	47k :CHIP
C1209	#	0.0047 :PT	R1214	#	10k :CHIP	R1247	#	22k :CHIP
C1210	#	0.033 :PT	R1215	#	22k :CHIP	R1248	#	22k :CHIP
C1211	#	0.22	R1216	#	47k :CHIP	R1249	#	47k :CHIP
C1212	#	0.22	R1217	#	47k :CHIP	R1250	#	22k :CHIP
C1216	#	0.47	R1218	#	22k :CHIP	R1251	#	100k :CHIP
C1218	#	0.1 25V F :CHIP	R1219	#	10k :CHIP	R1252	#	47k :CHIP
C1219	#	0.0047 :PT	R1220	#	10k :CHIP	R1253	#	100k :CHIP
C1220	#	0.1 25V F :CHIP	R1221	#	4.7k :CHIP	R1254	#	120k :CHIP
C1221	#	47 25V	R1222	#	10k :CHIP	R1255	#	12k :CHIP
C2105	#	10	R1223	#	18k :CHIP	R1256	#	1.5k :CHIP
C5106	#	0.1 25V F :CHIP	R1224	#	47k :CHIP	R1258	#	47k :CHIP
C2107	#	10	R1225	#	10k :CHIP	R2103	#	10k :CHIP
IC1201	#	BA14741F-T2	R1226	#	10k :CHIP	R2106	100 :CHIP	1k :CHIP
IC1202	#	BA14741F-T2	R1227	#	10k :CHIP	R2107	#	10k :CHIP
IC1203	#	BU4052BCF	R1228	#	18k :CHIP	R2108	#	1k :CHIP
IC1204	#	NJM4558M	R1229	#	10k :CHIP	R2113	#	100 :CHIP
IC2102	#	NJM2903M	R1230	#	10k :CHIP	R2117	#	10k :CHIP
R1201	#	390 :CHIP	R1231	#	22k :CHIP	R2118	#	22k :CHIP
R1202	#	47k :CHIP	R1232	#	22k :CHIP	R2121	#	22k :CHIP
R1203	#	47k :CHIP	R1233	#	120k :CHIP	R2122	#	4.7k :CHIP
R1204	#	27k :CHIP	R1234	#	100k :CHIP	R2125	#	4.7k :CHIP
R1205	#	27k :CHIP	R1235	#	27k :CHIP			# Mark : not mounted

A (2/2) BOARD

REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE
IC1201	①	4.5	IC1202	①	4.5	IC1203	⑯	4.5
	②	4.5		②	4.5		⑮	4.5
	③	4.5		③	GND		⑭	4.5
	④	9.0		④	4.5		⑬	9.0
	⑤	4.5		⑤	4.5		①	4.5
	⑥	4.5		⑥	4.5		②	4.5
	⑦	4.5		⑦	4.5		③	4.5
	⑧	4.5		⑧	4.5	IC1204	④	GND
	⑨	4.5		①	4.5		⑤	4.5
	⑩	4.5		②	4.5		⑥	4.5
	⑪	GND		③	4.5		⑦	4.5
	⑫	4.5		④	4.5		⑧	9.0
	⑬	4.5		⑤	4.5		①	0
	⑭	4.5	IC1203	⑥	GND		②	1.2
IC1202	①	4.5		⑦	GND		③	0
	②	4.5		⑧	GND	IC2102	④	GND
	③	4.5		⑨	0		⑤	0
	④	9.0		⑩	0		⑥	1.2
	⑤	4.5		⑪	4.5		⑦	0
	⑥	4.5		⑫	4.5		⑧	5.0

A (2/2) BOARD

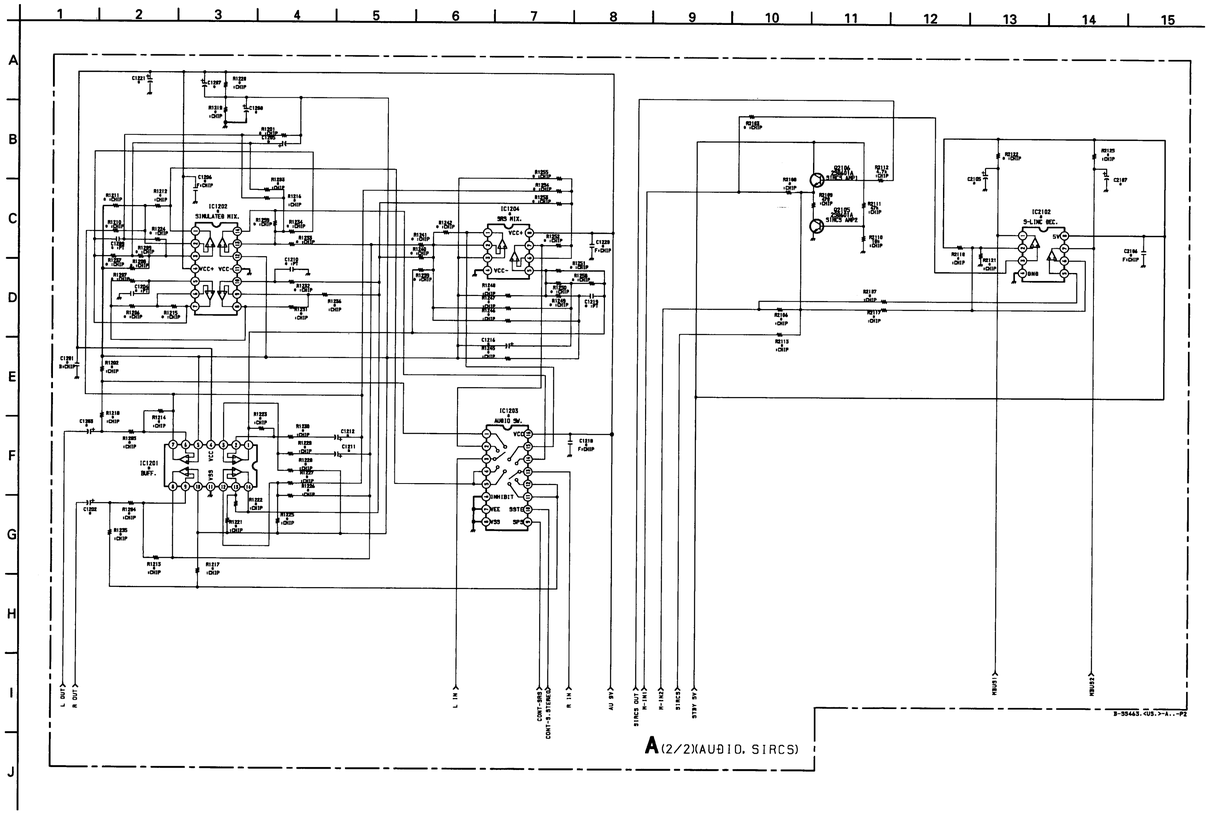
REF.		VOLTAGE
Q2105	E	GND
	C	0
	B	0.6
Q2106	E	0
	C	5.0
	B	0

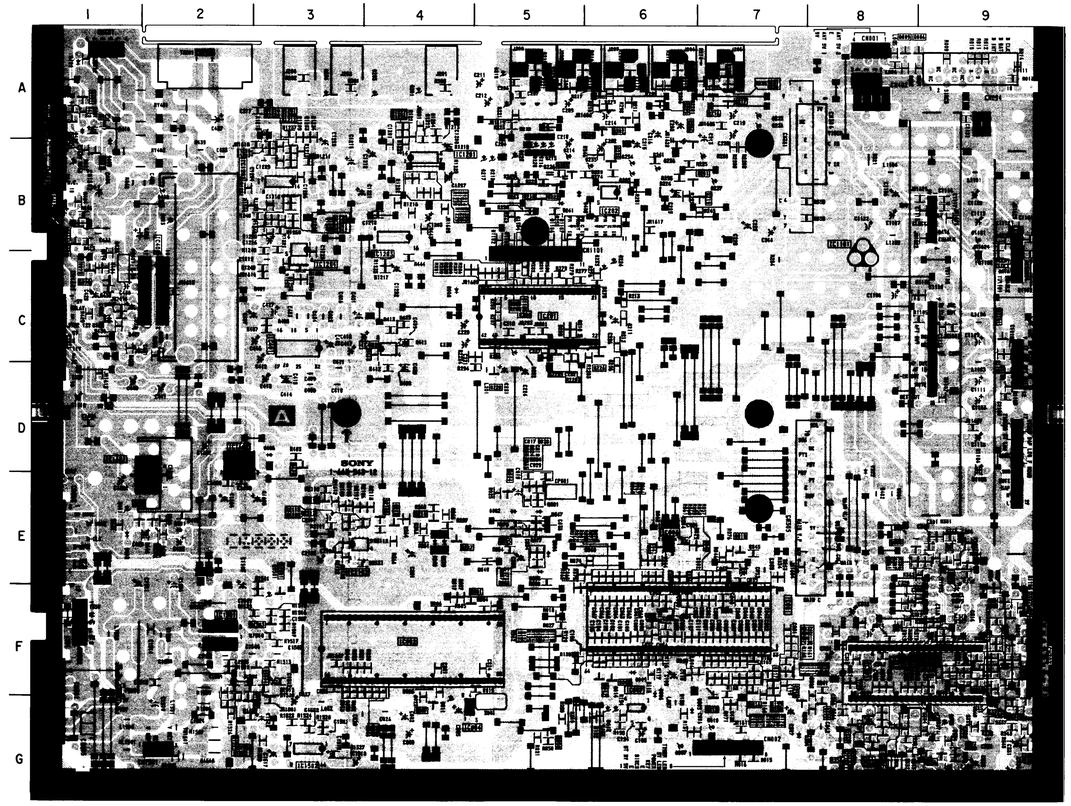
A BOARD

IC											
IC001	F–7	Q003	F–6 ①	Q303	E–8 ①	D002	E–5 –	D232	B–1 –
IC002	F–4	Q004	E–5 ①	Q304	E–9 ①	D003	E–5 –	D234	B–6 –
IC003	E–6	Q005	E–5 ①	Q305	E–9 ①	D004	E–5 –	D235	B–6 –
IC004	G–4	Q006	A–8 ①	Q306	F–9 ①	D007	G–6 –	D236	B–6 –
IC007	G–6	Q007	G–4 ①	Q307	G–8 ①	D008	C–4 –	D237	B–7 –
IC201	C–5	Q008	G–5 ①	Q308	G–8 ①	D010	G–7 –	D238	B–7 –
IC202	B–6	Q009	A–8 ①	Q311	G–9 ①	D201	A–4 –	D239	E–4 –
IC301	F–8	Q013	E–7 ①	Q312	F–9 ①	D202	C–5 –	D240	E–4 –
IC401	C–3	Q015	F–7 ①	Q313	F–9 ①	D203	A–4 –	D241	B–5 –
IC402	C–4	Q016	F–7 ①	Q314	G–9 ①	D204	A–3 –	D303	D–8 –
IC403	C–1	Q017	F–7 ①	Q401	A–1 ①	D205	B–6 –	D305	G–9 –
IC1101	C–8	Q201	B–6 ①	Q402	B–1 ①	D206	C–6 Ⓐ	D401	E–2 –
IC1201	B–4	Q202	A–6 ①	Q403	B–1 ①	D207	C–5 Ⓐ	D403	B–2 –
IC1202	B–3	Q203	B–5 ①	Q404	A–1 ①	D208	C–5 Ⓐ	D404	A–1 –
IC1203	B–4	Q205	B–6 ①	Q405	E–2 ①	D209	C–5 Ⓐ	D405	E–1 –
IC1204	B–3	Q206	B–6 ①	Q406	E–1 ①	D210	C–5 Ⓐ	D406	D–3 –
IC1501	F–2	Q207	E–4 ①	Q407	B–1 ①	D211	C–6 Ⓐ	D407	A–1 –
IC1502	G–3	Q208	A–6 ①	Q408	C–1 ①	D212	C–6 Ⓐ	D408	B–5 –
IC1601	D–1	Q209	A–6 ①	Q409	C–1 ①	D213	C–6 Ⓐ	D409	B–1 –
IC1602	D–2	Q213	E–4 ①	Q410	D–3 ①	D214	B–5 –	D410	B–2 –
IC2102	E–3	Q214	E–4 ①	Q411	B–1 ①	D215	B–5 –	D411	E–1 –
		Q216	A–7 ①	Q1101	C–9 ①	D216	B–5 –	D1101	B–9 –
TRANSISTOR		Q217	A–7 ①	Q1501	F–3 ①	D217	B–5 –	D1102	B–5 Ⓐ
	*	Q218	B–5 ①	Q2105	E–3 ①	D218	B–5 –	D1103	B–5 Ⓐ
Q001	F–5 ①	Q219	B–7 ①	Q2106	E–4 ①	D219	A–5 –	D1104	B–5 Ⓐ
Q002	F–6 ①	Q220	D–5 ①			D220	B–5 –	D1105	C–5 Ⓐ
		Q222	B–5 ①	**DIODE**		D221	A–5 –	D1106	B–5 Ⓐ
		Q226	C–6 ①			D222	B–5 –	D1107	B–5 Ⓐ
		Q301	F–9 ①		*	D225	A–7 –	D1501	F–3 –
		Q302	F–9 ①	D001	E–5 –	D226	A–7 –	D1502	F–2 –

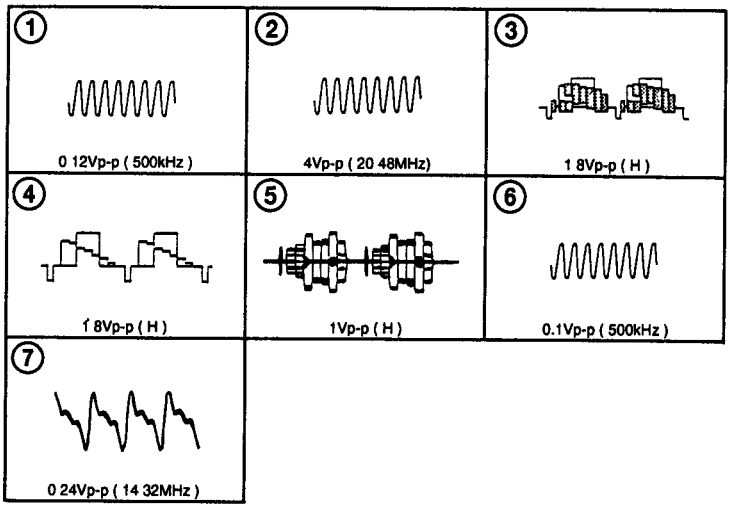
A [TUNER, AV SW, Y/C/J, AUDIO, V OUT, SIRCS]

– A BOARD –





PT BOARD



PT BOARD

REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE
IC5001	①	2.3	IC5052	㉛	3.9
	②	4.1		㉜	2.2
	④	0	IC5101	①	2.4
	⑩	1.0		④	2.3
	⑪	3.8		⑤	2.3
	⑫	4.5		㉕	0.5
	⑬	4.6		㉗	1.5
	⑭	0.1		㉘	2.6
	⑮	0.7		㉛	0.9
	⑯	2.8		㉝	2.9
	⑲	2.9		㉞	1.8
	⑳	2.9		㉟	1.8
	㉖	2.4		㊱	0.9
	㉙	4.5		㊲	0
	㉝	3.3		㊳	0
	㉞	3.6		㊴	0
	㊴	4.8		㊶	0.9
	㊲	4.8		㊸	5.0
	㊹	4.1		㊹	0
	㊵	3.3	IC5102	①	2.2
	㊵	0.7		②	2.0
IC5052	②	2.9		③	2.5
	③	2.4		⑤	1.1
	④	2.2		⑧	0
	⑦	0.4		⑨	4.8
	⑧	0		⑪	3.1
	⑪	1.9		⑬	4.4
	⑫	0		⑭	2.6
	⑭	-3.0		⑮	2.5
	⑰	0.1		⑯	4.0
	⑱	0.7		⑰	3.2
	⑲	0.1		⑱	3.9
	⑳	0.5		㉔	3.9
	㉑	4.8		㉕	2.1
	㉒	4.8		㉗	0
	㉙	1.6		㉚	2.2
	㉚	2.2			

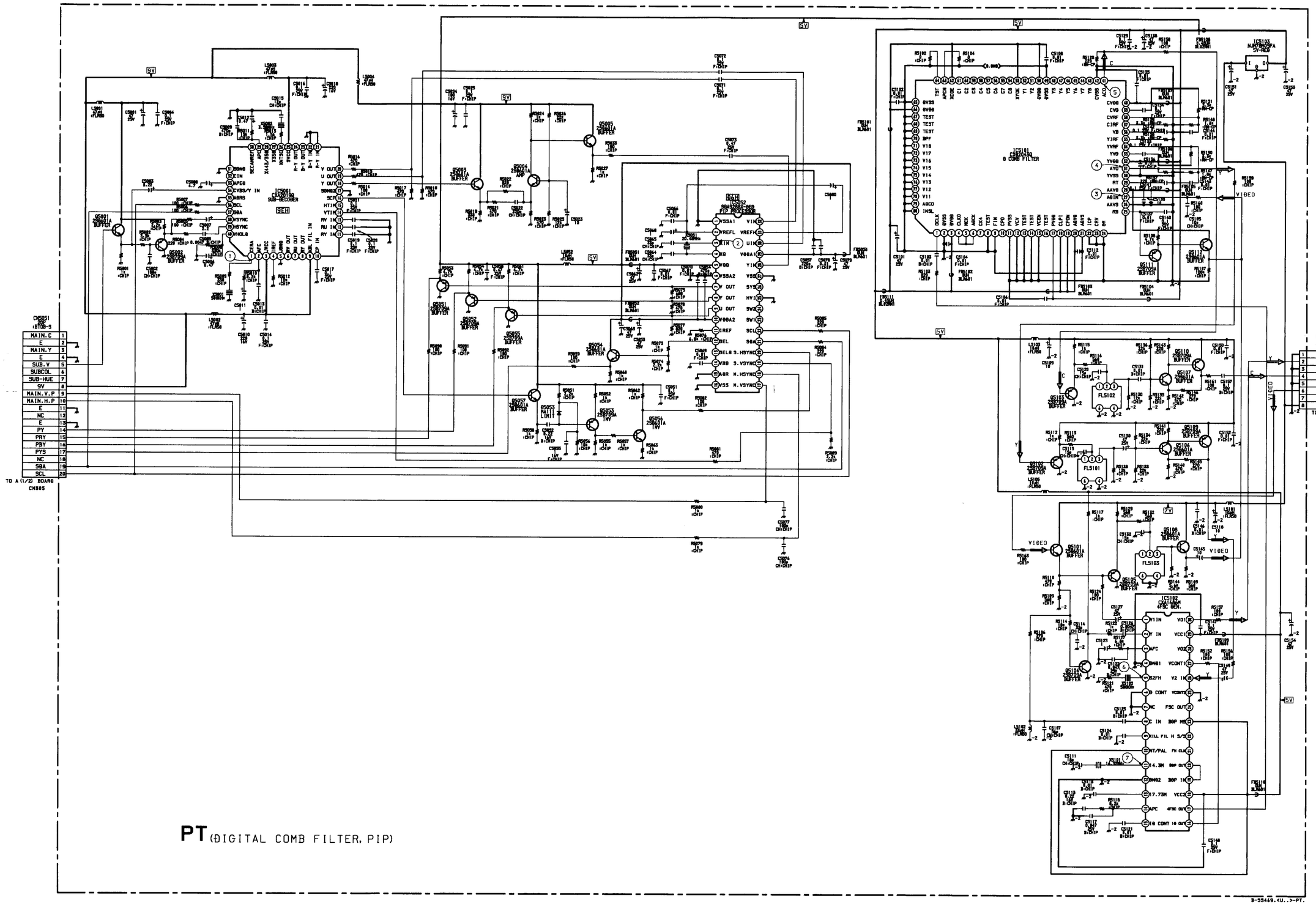
PT BOARD

REF.		VOLTAGE	REF.		VOLTAGE
Q5001	E	5.8	Q5057	E	0
	C	8.8		C	4.9
	B	6.5		B	0
Q5002	E	6.5	Q5101	E	1.9
	C	GND		C	5.0
	B	5.8		B	2.5
Q5003	E	2.2	Q5102	E	1.8
	C	8.5		C	GND
	B	2.8		B	0.9
Q5004	E	2.2	Q5103	E	1.6
	C	4.1		C	GND
	B	2.9		B	0.9
Q5005	E	3.5	Q5104	E	1.5
	C	8.5		C	GND
	B	4.1		B	0.8
Q5051	E	1.0	Q5105	E	2.6
	C	GND		C	GND
	B	0.4		B	1.9
Q5052	E	0.5	Q5106	E	1.7
	C	GND		C	4.4
	B	0		B	2.4
Q5053	E	*	Q5107	E	1.7
	C	*		C	4.4
	B	*		B	2.4
Q5054	E	0	Q5108	E	1.7
	C	4.9		C	5.0
	B	0		B	2.3
Q5055	E	1.1	Q5109	E	5.0
	C	GND		C	2.0
	B	0.5		B	4.4
Q5056	E	*	Q5110	E	5.0
	C	*		C	2.0
	B	*		B	4.4

Schematic diagram
← A(2/2) board

Schematic diagram
PT board →

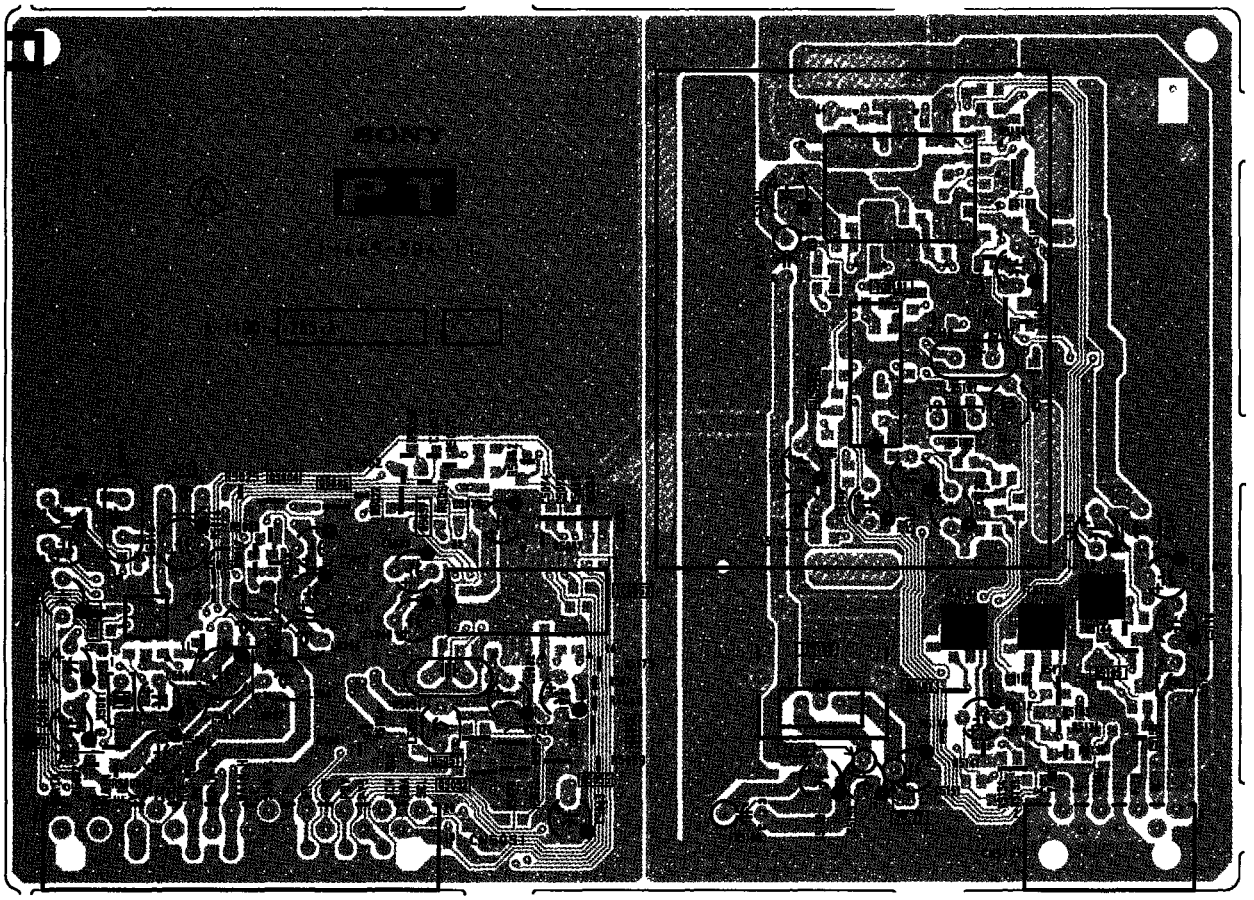
KP-41T35



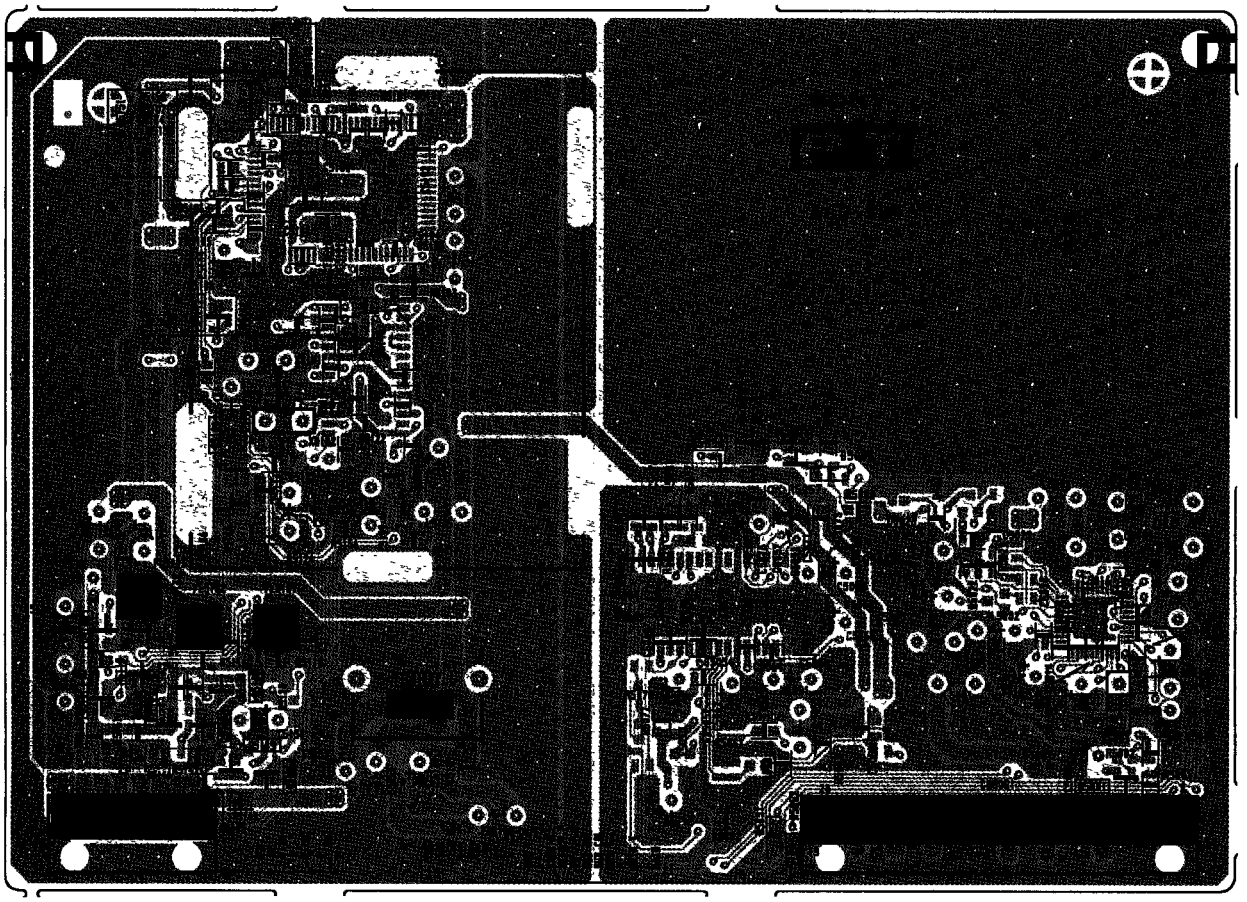
PT (DIGITAL COMB FILTER, PIP)

B-55449-<U..>-PT.

– **PT BOARD** – <Component Side>



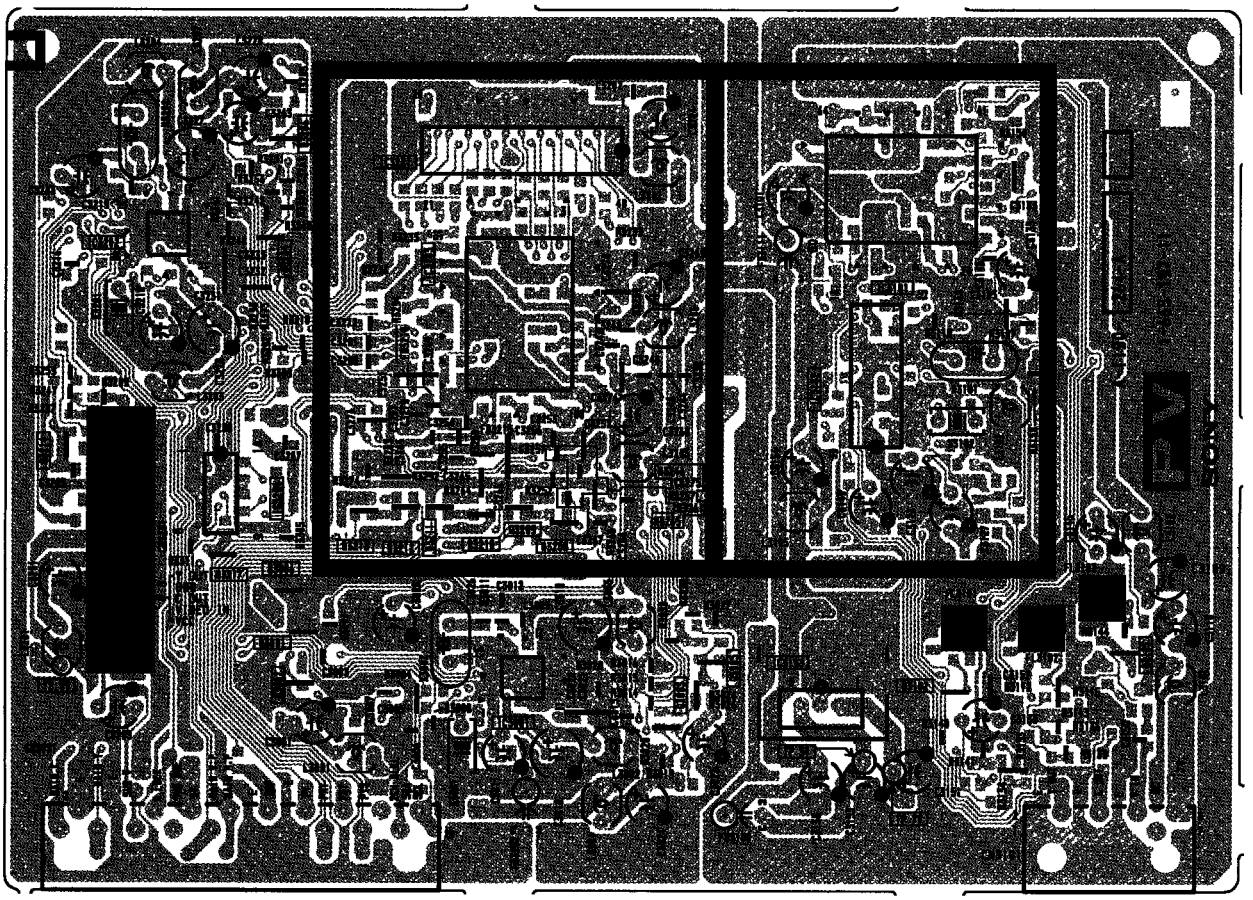
<Conductor Side>



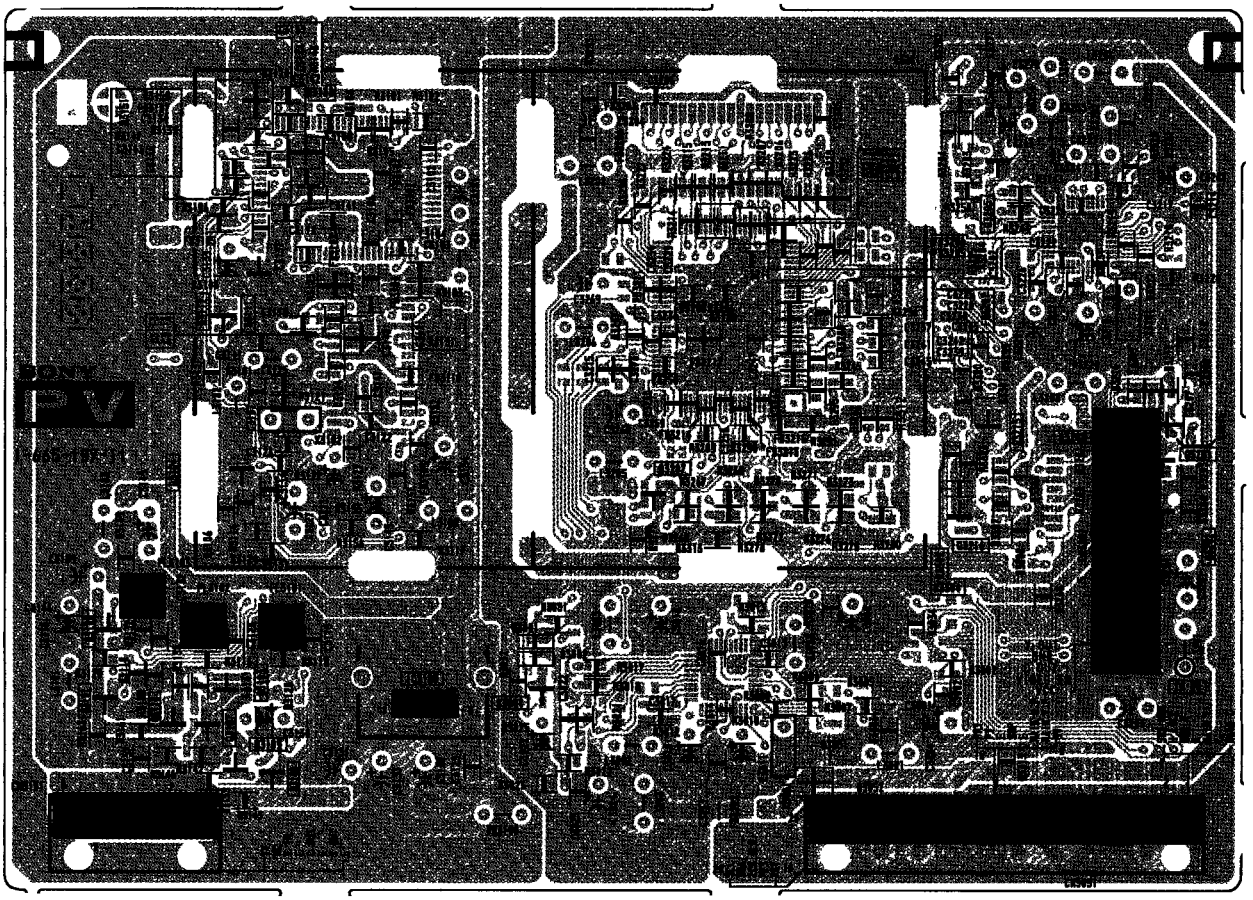
Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

– **PV BOARD** – <Component Side>

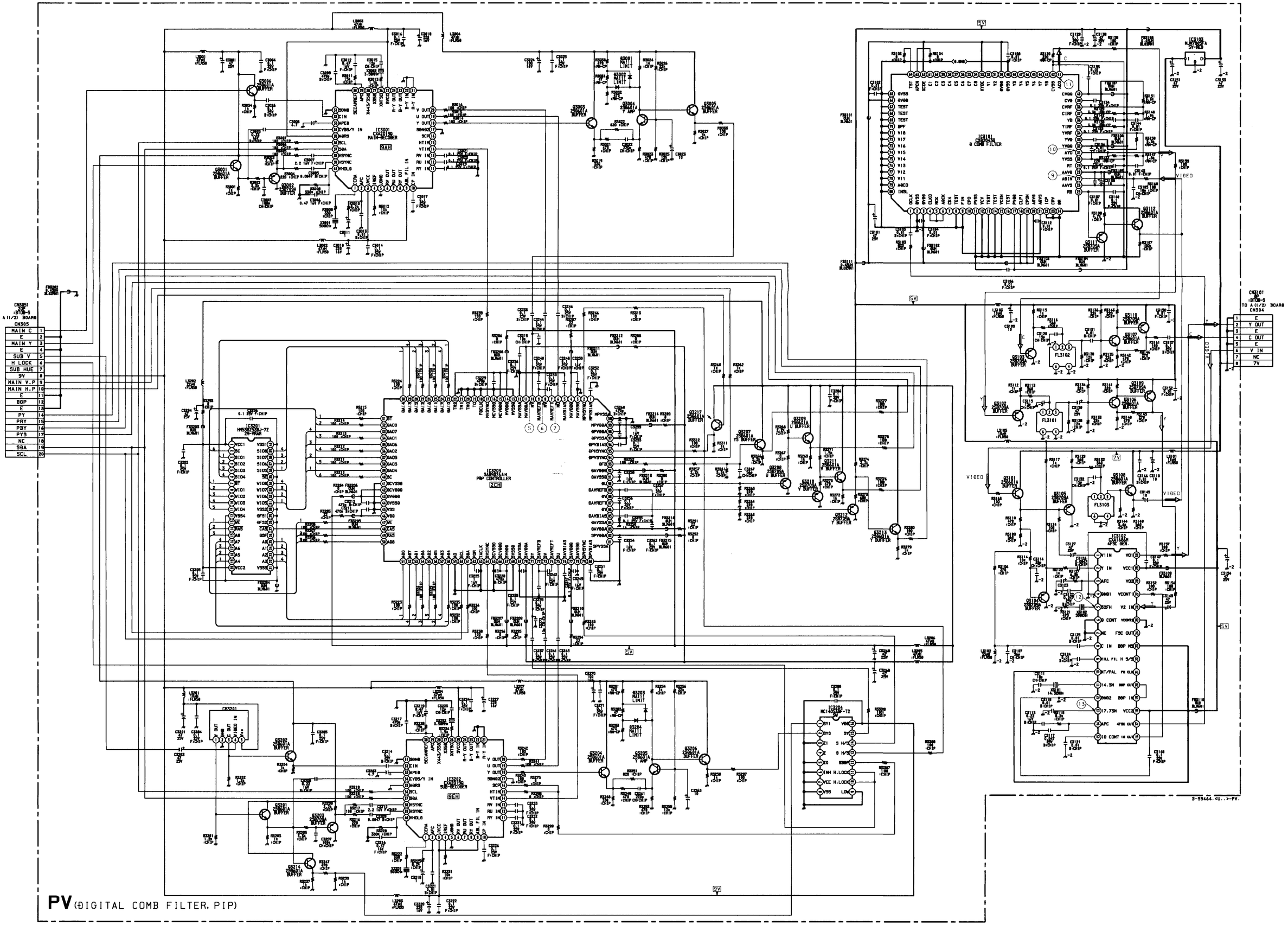


<Conductor Side>



Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.


PV (DIGITAL COMB FILTER, PIP)
IC3201 CXA2013Q MAIN-DECODER
IC3203 CXA2015Q SUB-DECODER
IC3101 CXA2145Q 6 COMB FILTER
IC3102 CXA1645M AFC GEN.
IC3204 NJM2233F-T2
IC3201 HM53462BJP-7Z 2M-VRAM
IC3202 M30622MAH P&P CONTROLLER
CN3051 BTOB-S TO A (1/2) BOARD CN305
CN3101 BTOB-S TO A (1/2) BOARD CN304
MAIN C
MAIN Y
SUB V
H LOCK
SUB HUE
9V
MAIN V.P
MAIN H.P
BGP
PY
PRY
PBY
PYS
SDA
SCL
E
Y OUT
C OUT
V IN
7V
NC
VIDEO
5V
9V

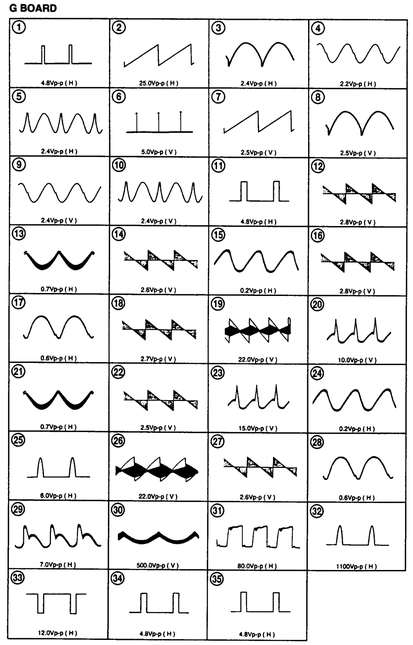
G BOARD

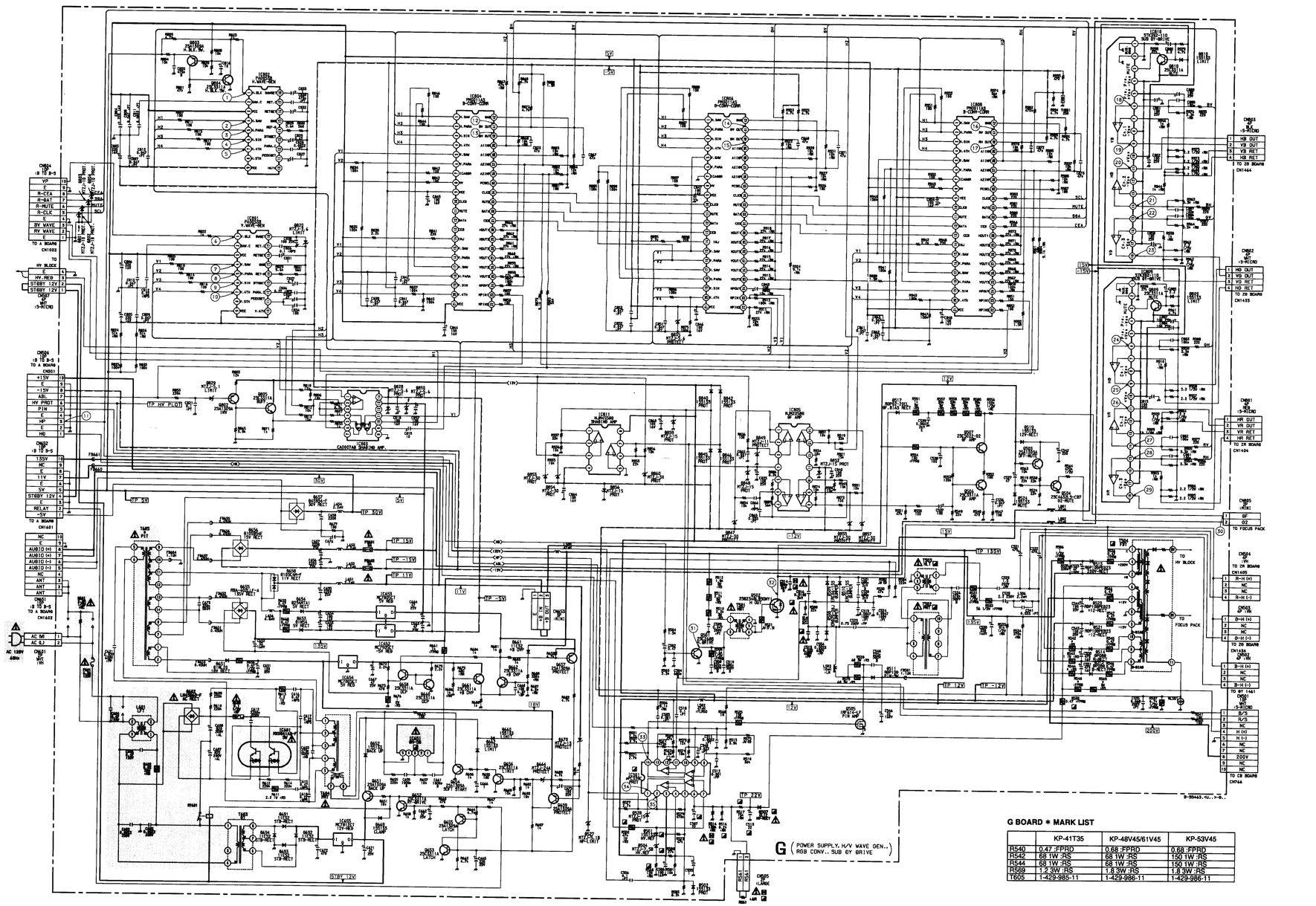
REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE	REF.	Pin No.	VOLTAGE
IC501	①	3.4	IC802	①	0.5	IC804	⑰	0	IC806	⑰	0	IC808	⑰	0
	②	0.7		②	1.1		⑱	0.5		⑱	0		⑱	0
	③	12.1		③	4.9		⑲	4.7		⑲	0		⑲	0
	④	3.3		④	0		⑳	0.1		⑳	0		⑳	0
	⑤	1.8		⑤	-0.9		㉑	4.9		㉑	0		㉑	-0.2
	⑥	7.9		⑥	4.8		㉒	4.8		㉒	0.4		㉒	0.4
	⑦	8.1		⑦	-1.0		㉓	0		㉓	4.7		㉓	0.4
	⑧	1.4		⑧	-5.1		㉔	0		㉔	0.1		㉔	GND
	⑨	2.2		⑨	0		㉕	0		㉕	4.9		㉕	GND
	⑩	5.5		⑩	-0.3		㉖	4.8		㉖	0.1		㉖	GND
	⑪	1.8		⑪	0.3		㉗	0		㉗	0		㉗	-14.3
	⑫	GND		⑫	1.7		㉘	0		㉘	0		㉘	15.3
	⑬	1.4		⑬	GND		㉙	0.2		㉙	0		㉙	14.3
	⑭	9.9		⑭	-1.9		㉚	GND		㉚	0		㉚	-0.1
	⑮	GND		⑮	1.2		㉛	7.2		㉛	0		㉛	-0.1
IC601	①	-1.9		①	-1.1		㉜	7.2		㉜	0	IC809	①	-15.3
	②	136.0		②	-0.4		㉝	7.0		㉝	0.1		②	-0.2
	③	274.0		③	-0.4		㉞	12.1		㉞	GND		③	14.5
	④	136.0		④	-0.3		㉟	0		㉟	0		④	0.5
	⑤	134.0		⑤	-0.3		㊱	0		㊱	-0.9		⑤	-15.3
	⑥	134.0		⑥	1.6	IC805	㊲	0		㊲	0		⑥	0.3
IC651	⑦	2.4	IC803	⑦	0.3		㊳	-0.8		㊳	-1.0		⑦	0.3
	⑧	13.8		⑧	GND		㊴	0		㊴	0		⑧	-0.2
	⑨	GND		⑨	0		㊵	-12.3		㊵	-0.4		⑨	-0.2
	⑩	1		⑩	0		㊶	0		㊶	4.9		⑩	-15.3
IC652	⑪	GND		⑪	4.9		㊷	0		㊷	4.9		⑪	-0.4
	⑫	-5.1		⑫	4.9		㊸	0.8		㊸	-5.1		⑫	GND
	⑬	10.6		⑬	-5.1		㊹	0		㊹	4.8		⑬	GND
IC653	⑭	GND		⑭	0		㊺	0		㊺	4.9		⑭	-14.5
	⑮	4.9		⑮	-0.9		㊻	-0.9		㊻	0.1		⑮	-15.3
IC654	⑯	18.0		⑯	0		㊼	0		㊼	4.7		⑯	14.5
	⑰	GND		⑰	-1.0		㊽	-1.0		㊽	-2.1		⑰	0.2
	⑱	5.0		⑱	0		㊾	0		㊾	0		⑱	0.2
IC655	⑲	15.7		⑲	-0.4	IC808	㊿	-0.4		㊿	-0.8		⑲	-15.3
	⑳	GND		⑳	-5.1		(51)	0	IC810	(51)	0		⑳	-0.3
	㉑	11.9		㉑	4.9		(52)	4.9		(52)	-0.9		㉑	14.5
	㉒	0.2		㉒	-5.1		(53)	0		(53)	0		㉒	0.1
	㉓	1.2	IC804	㉓	-2.2	IC806	(54)	4.8		(54)	-0.5		㉓	-15.3
	㉔	4.8		㉔	0		(55)	4.8		(55)	4.9		㉔	0.1
	㉕	0		㉕	-0.8		(56)	0.1		(56)	0.1		㉕	0
	㉖	-0.8		㉖	0		(57)	4.7		(57)	0		㉖	0.1
	㉗	0		㉗	-0.9		(58)	-2.1		(58)	0		㉗	0.1
	㉘	-1.1		㉘	0		(59)	0		(59)	-0.5		㉘	-15.3
IC801	㉙	-5.1		㉙	-0.5		(60)	-0.8		(60)	0		㉙	0.2
	㉚	0.4		㉚	4.9		(61)	0		(61)	0	IC811	㉚	-1.2
	㉛	-0.9		㉛	0		(62)	-0.9		(62)	0		㉛	-0.3
	㉜	0.3		㉜	-0.1		(63)	0		(63)	0.2		㉜	-0.3
	㉝	1.2		㉝	0		(64)	-0.5		(64)	0.2		㉝	-12.3
	㉞	GND		㉞	-0.4		(65)	4.9		(65)	4.7		㉞	GND
	㉟	-1.5		㉟	0		(66)	-0.4		(66)	0		㉟	0
	㊱	1.2		㊱	0		(67)	0		(67)	4.9		㊱	0.6
	㊲	-1.6		㊲	0		(68)	0		(68)	4.8		㊲	12.1

G BOARD

REF.		VOLTAGE	REF.		VOLTAGE
Q501	C	47.0	Q658	C	4.9
	B	-0.4		B	0.6
	E	GND		E	17.6
Q502	C	140.0	Q659	C	0
	B	0		B	17.6
	E	9.9		E	GND
Q505	C	21.9	Q660	C	0.6
	B	GND		B	0.6
	E	11.1		E	2.4
Q506	C	11.3	Q661	C	5.2
	B	1.7		B	3.1
	E	11.5		E	2.4
Q507	C	780.0	Q662	C	4.9
	B	12.1		B	2.7
	E	11.9		E	4.9
Q651	C	11.9	Q803	C	2.3
	B	11.2		B	4.0
	E	GND		E	2.4
Q652	C	0	Q803	C	0
	B	0.7		B	0.5
	E	GND		E	GND
Q653	C	1.7	Q804	C	0.5
	B	0		B	0
	E	14.0		E	1.7
Q654	C	GND	Q805	C	12.1
	B	13.8		B	2.3
	E	1.7		E	-15.3
Q655	C	0	Q809	C	-14.3
	B	GND		B	-15.3
	E	GND		E	-15.3
Q656	C	13.8	Q810	C	-14.5
	B	0		B	-15.3
Q657	C	4.9			
	B	4.9			

G BOARD



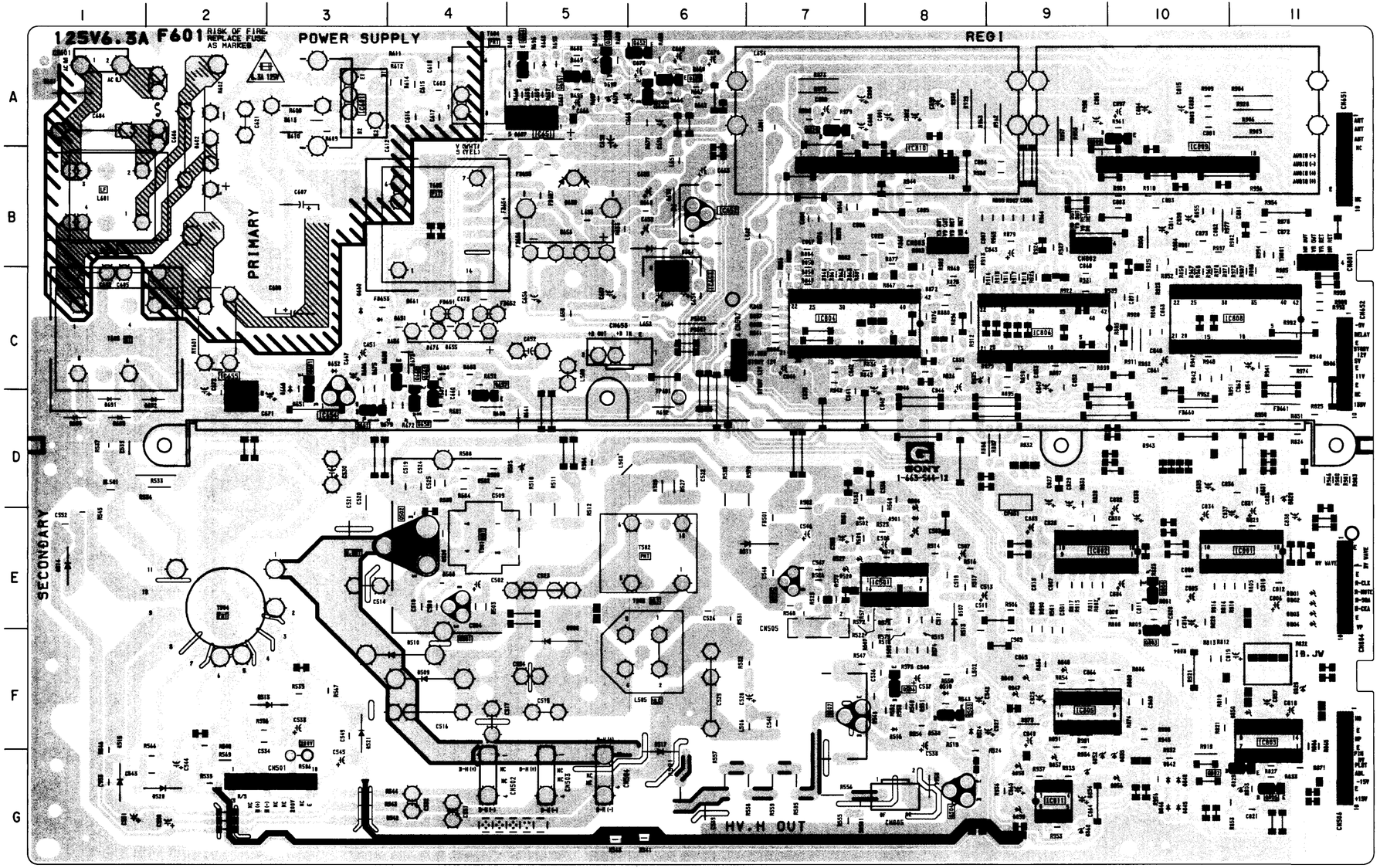


G BOARD * MARK LIST

	KP-41T35	KP-48V45/61V45	KP-53V45
R540	0.47 :FPRD	0.68 :FPRD	0.68 :FPRD
R542	68 1W :RS	68 1W :RS	150 1W :RS
R544	68 1W :RS	68 1W :RS	150 1W :RS
R569	1.2 3W :RS	1.8 3W :RS	1.8 3W :RS
T605	1-429-985-11	1-429-986-11	1-429-986-11

Schematic diagram
← PV board

Schematic diagram
G board →



G [POWER SUPPLY, H/V WAVE GEN, RGB CONV, SUB DY DRIVE]

G BOARD

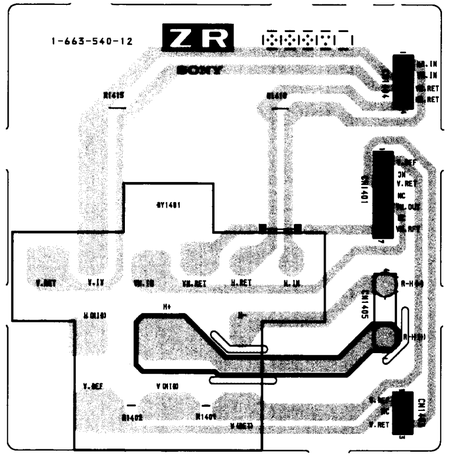
IC		Q506	F–8	D509	F–4	D691	D–1
		Q507	F–7	D510	F–4	D692	D–2
		Q651	C–3	D511	E–7	D693	D–1
IC501	E–8	Q652	A–6	D513	F–2	D694	D–1
IC601	A–3	Q653	A–6	D514	E–1	D801	E–11
IC651	A–5	Q654	A–5	D515	G–1	D802	E–11
IC652	B–6	Q655	A–6	D517	G–6	D803	E–11
IC653	C–6	Q656	A–5	D519	F–8	D804	E–11
IC654	D–3	Q657	D–4	D520	G–2	D820	D–11
IC655	C–2	Q658	D–4	D521	F–3	D828	F–11
IC801	E–11	Q659	A–5	D524	F–8	D829	G–11
IC802	E–9	Q660	C–4	D527	E–7	D835	C–8
IC803	F–11	Q661	D–3	D528	E–7	D840	G–10
IC804	C–7	Q662	C–4	D602	A–2	D842	G–10
IC805	F–9	Q802	G–11	D651	C–3	D845	G–10
IC806	C–9	Q803	F–10	D652	C–3	D846	G–10
IC808	C–11	Q804	E–10	D653	B–6	D847	F–9
IC809	B–10	Q805	G–11	D654	B–6	D848	F–9
IC810	B–8	Q809	A–10	D655	C–4	D849	F–9
IC811	G–9	Q810	A–7	D656	B–5	D850	F–11
				D657	A–5	D852	G–9
TRANSISTOR		DIODE		D658	B–5	D853	G–9
				D660	C–3	D854	G–9
Q501	E–4	D501	E–8	D661	D–5	D855	G–10
Q502	E–4	D502	E–8	D662	A–5	D856	G–10
Q503	F–8	D504	D–8	D664	A–5	D857	G–9
Q504	G–8	D507	E–8	D669	C–3	D859	G–9
Q505	E–7	D508	F–5	D670	A–5	D860	G–9

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

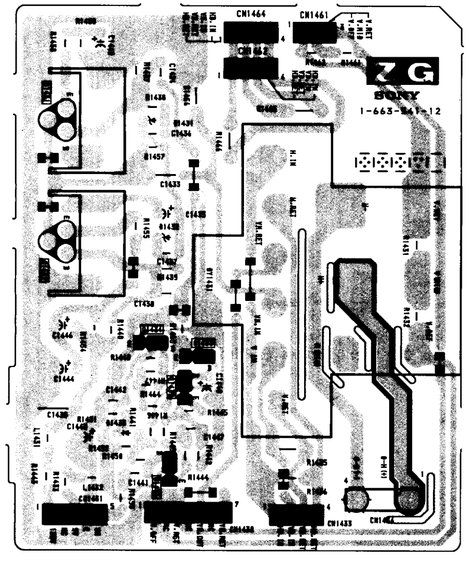
Schematic diagrams
ZG, ZR boards ➡

ZR [VM, DY] **ZG** [VM, DY]

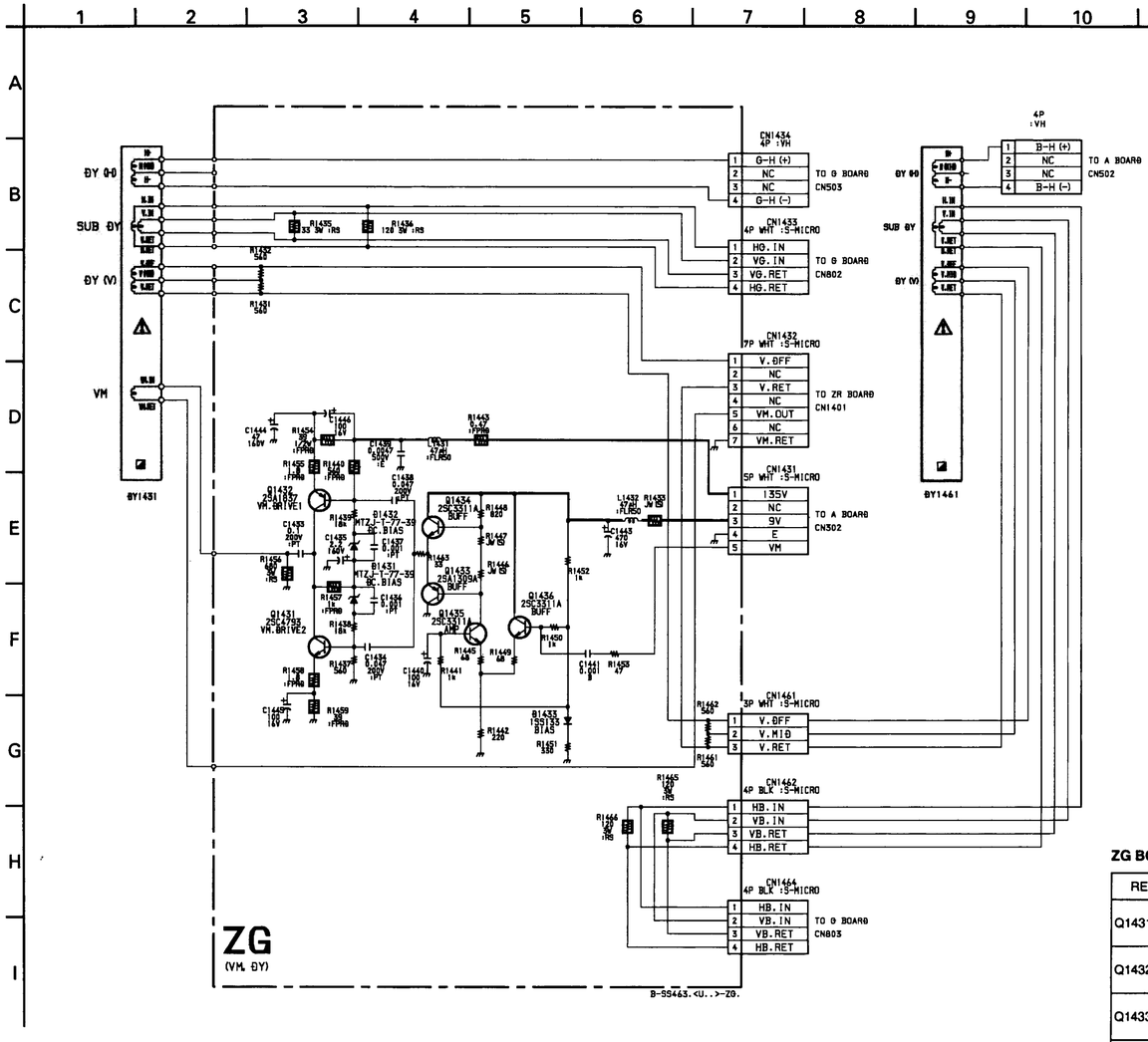
– ZR BOARD –

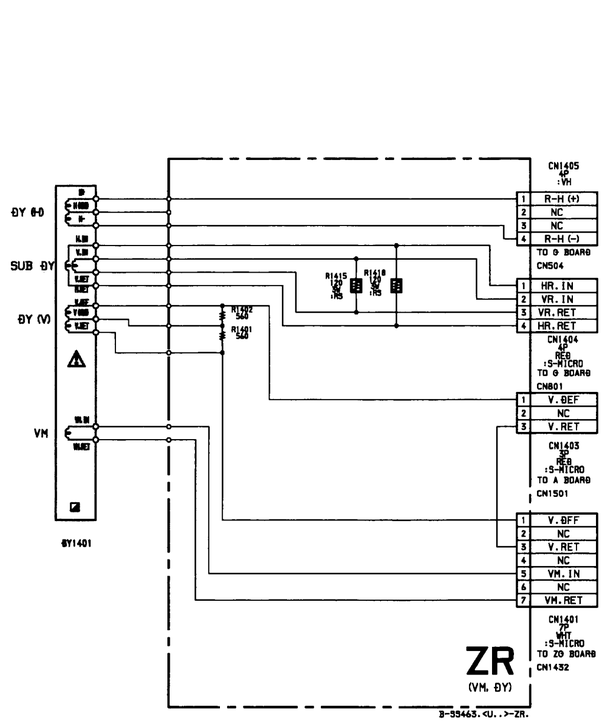


– ZG BOARD –



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



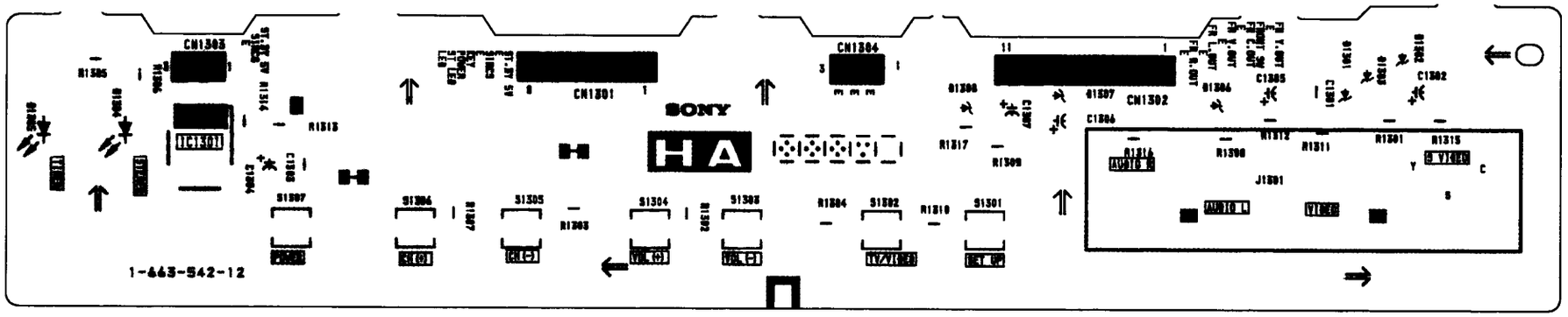


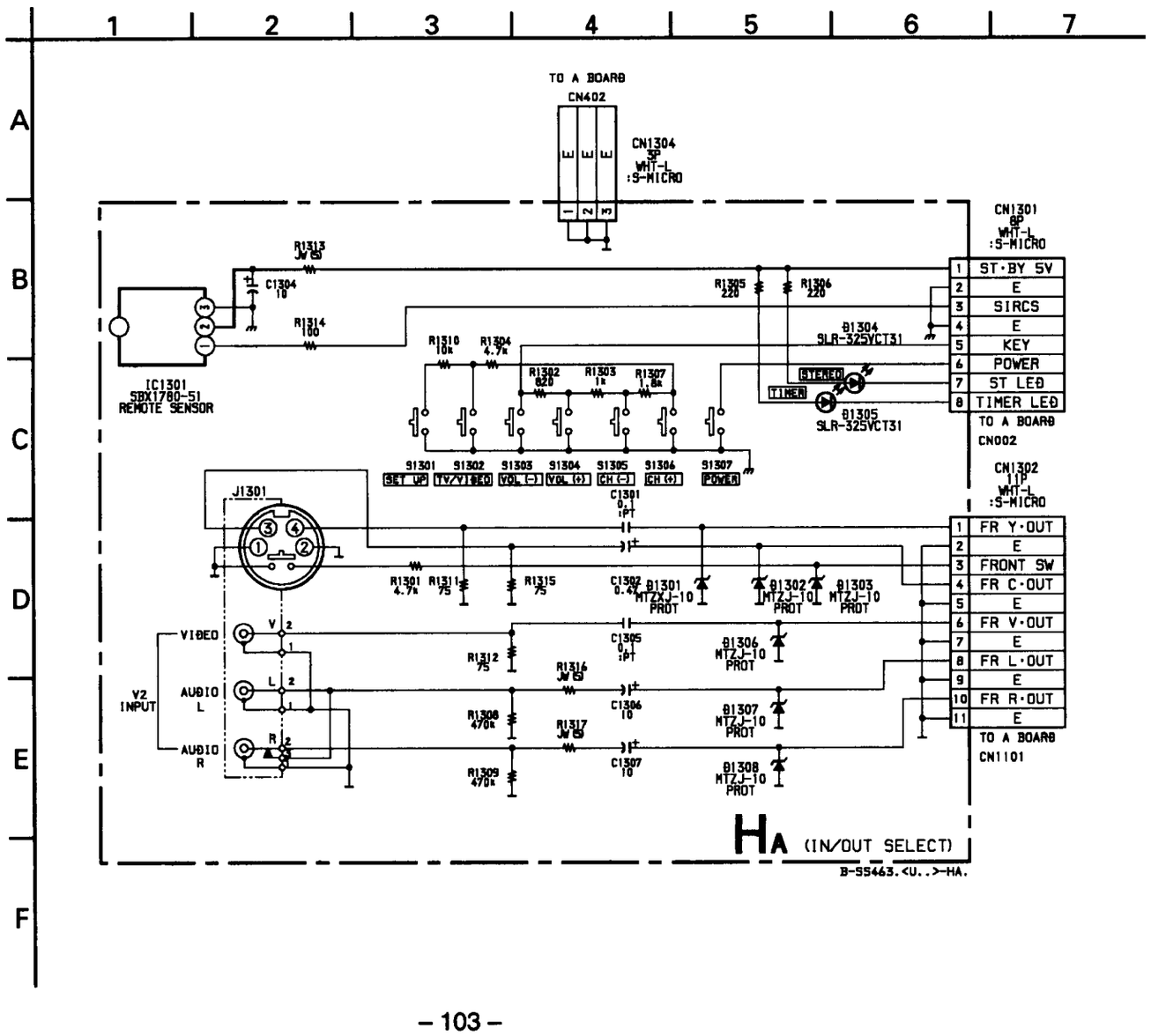
ZG BOARD

REF.		VOLTAGE
Q1431	E	0.5
	C	67.2
	B	0.9
Q1432	E	138.4
	C	67.2
	B	134.4
Q1433	E	5.8
	C	GND
	B	5.7
Q1434	E	5.8
	C	9.0
	B	5.7
Q1435	E	2.1
	C	5.7
	B	2.7
Q1436	E	2.1
	C	9.0
	B	2.7

HA [IN/OUT SELECT]

– HA BOARD –

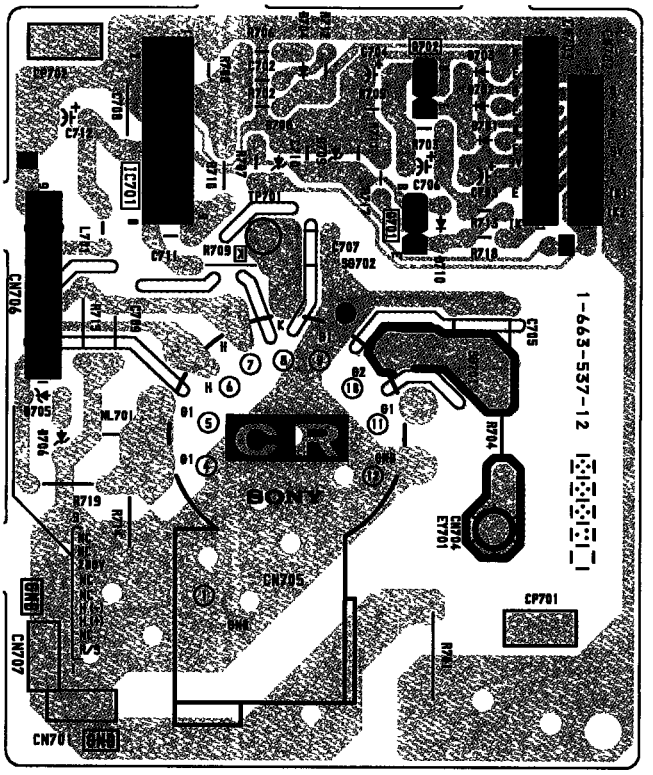


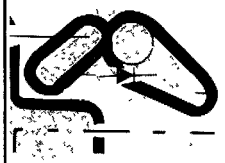


HA BOARD

REF.	Pin No.	VOLTAGE
IC1301	①	5.0
	②	5.0
	③	GND

– CR BOARD –

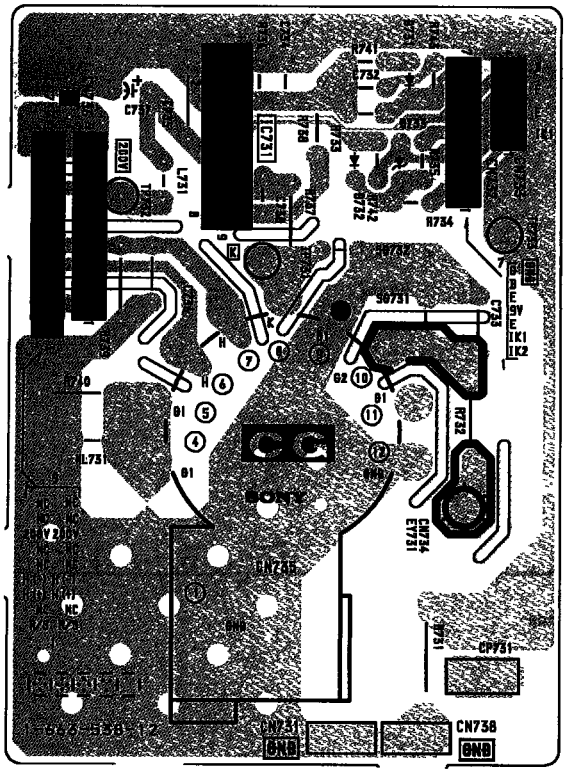




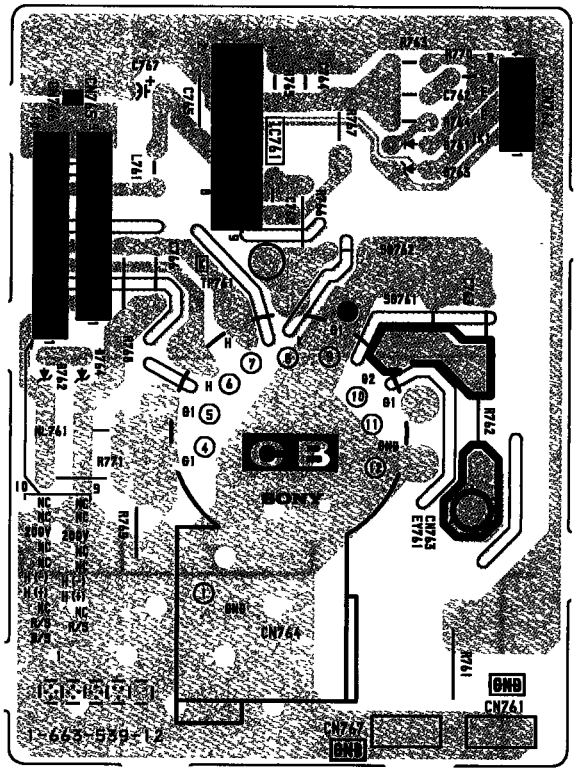
NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

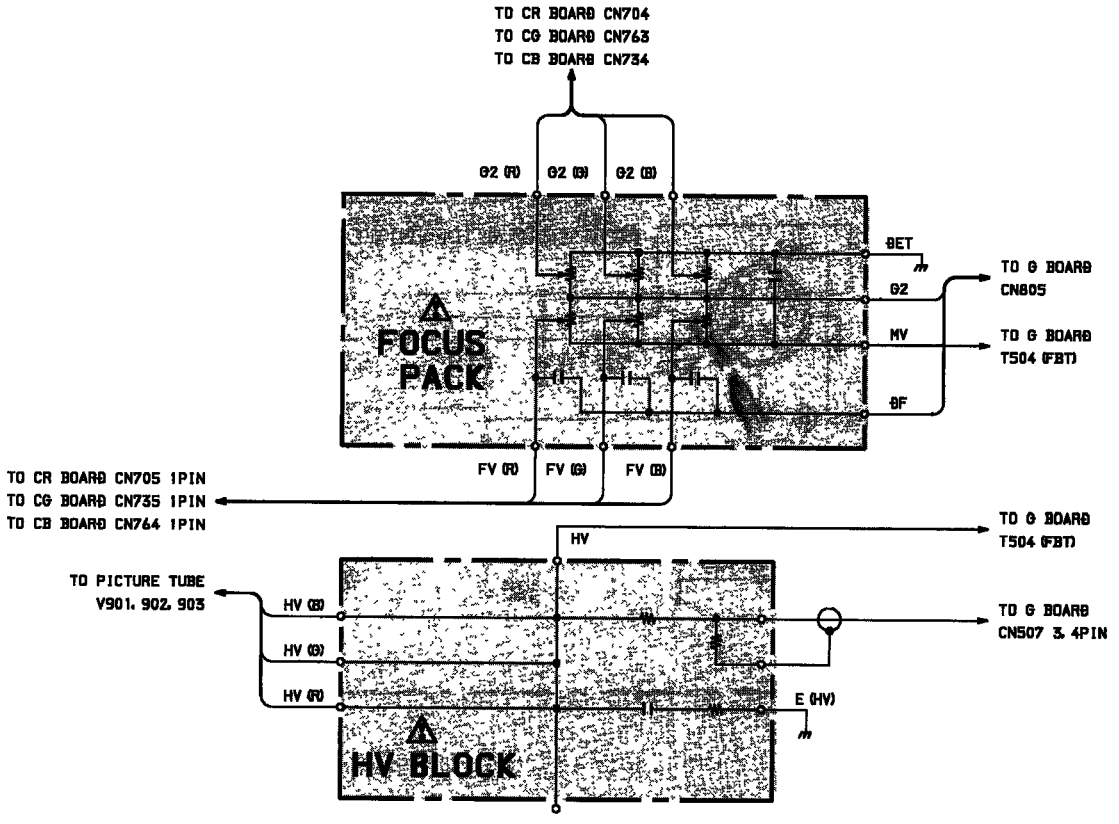
Schematic diagram
← HA **board**

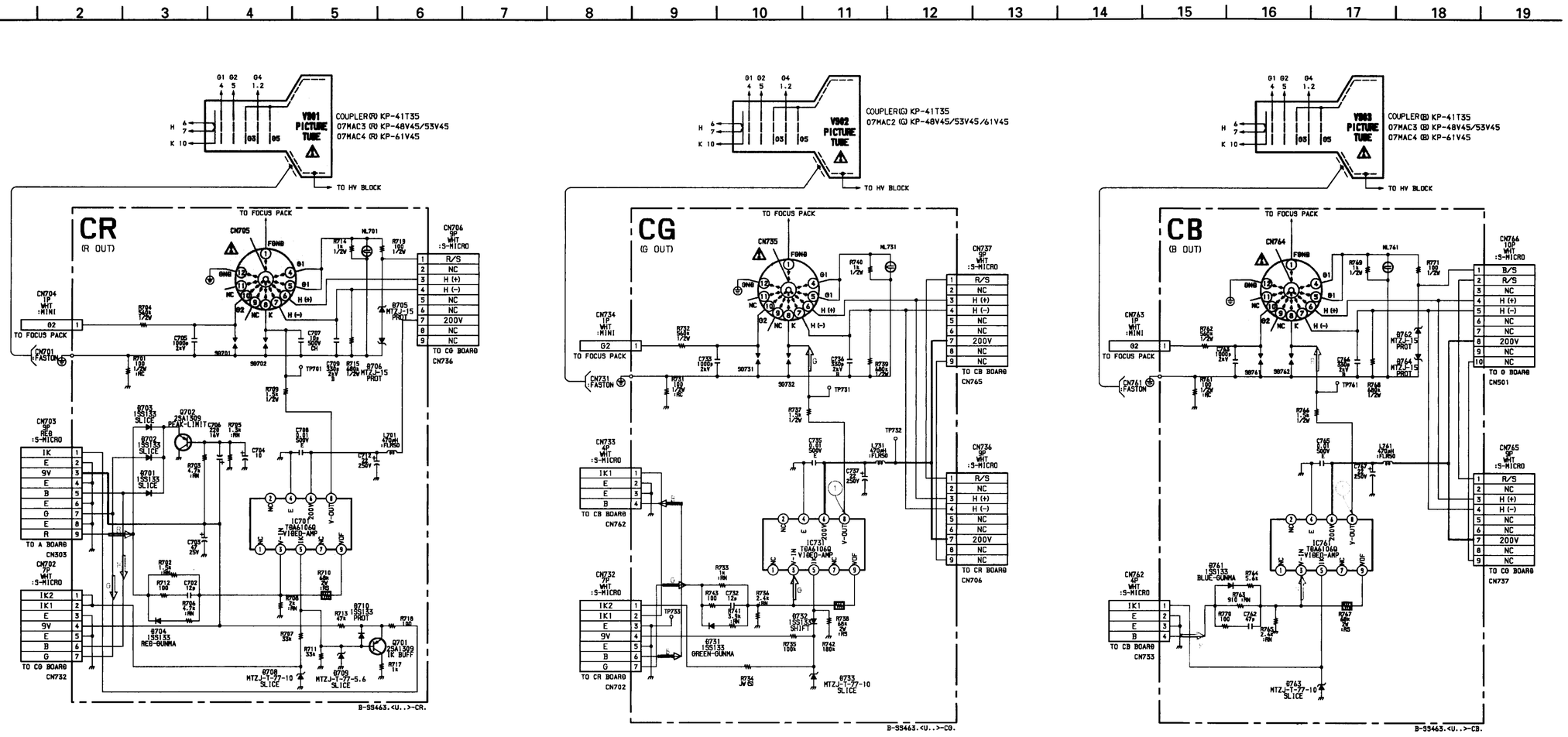
– CG BOARD –



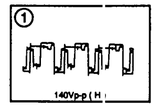
– CB BOARD –







CR BOARD



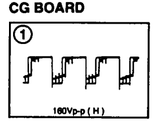
CR BOARD

REF.	Pin No.	VOLTAGE
IC701	③	2.6
	④	GND
	⑤	4.1
	⑥	196.5
	⑧	137.1
	⑨	135.0

CR BOARD

REF.		VOLTAGE
Q701	E	4.4
	C	0
	B	4.1
Q702	E	2.2
	C	GND
	B	1.9

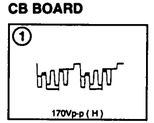
CG BOARD



CG BOARD

REF.	Pin No.	VOLTAGE
IC731	③	2.5
	④	GND
	⑤	3.5
	⑥	99.6
	⑧	45.0
	⑨	44.6

CB BOARD



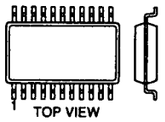
CB BOARD

REF.	Pin No.	VOLTAGE
IC761	③	2.5
	④	GND
	⑤	4.9
	⑥	96.6
	⑧	13.0
	⑨	09.7

Schematic diagrams
← CB, CG, CR boards

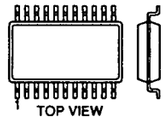
6-5. SEMICONDUCTORS

BA14741F
CA0007AM



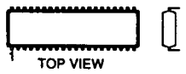
14pin SOP

BH3856FS-E2
SDA9288X



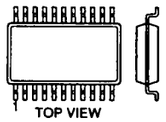
32pin SOP

CA0007AD
NJM2058D
µPC339C



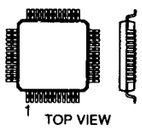
14pin DIP

CXA1686M



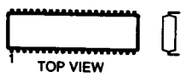
30pin SOP

CXA2019Q



40pin QFP

CXA2025AS



48pin DIP

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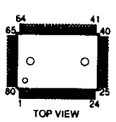

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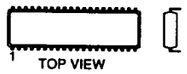

64pin DIP

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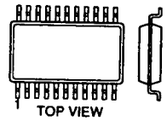
TC528257J-80 (EL)



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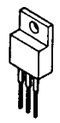

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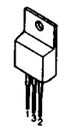

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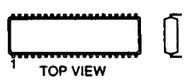

42pin DIP

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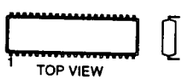

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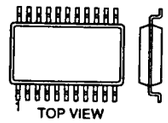

8pin SOP

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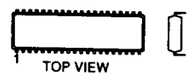

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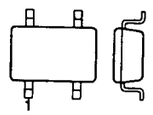
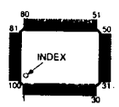


5pin chip

SAB9076H



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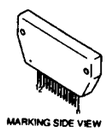

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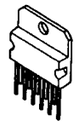

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9pin ZIP

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2SD601A-QRS-TX

IRF614
IRF614-LF

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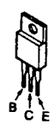

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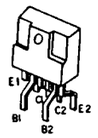

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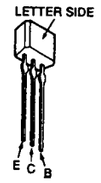
2SC2785-HFE
2SC3311A-QRSTA



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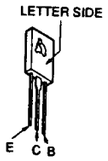

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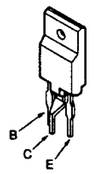

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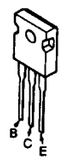

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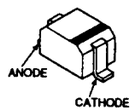

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GP08DPKG23
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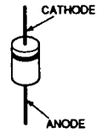
RGP10GPKG23



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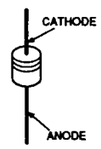
MTZJ-T-77-10
MTZJ-T-77-10B
MTZJ-T-11
MTZJ-T-15
MTZJ-T-20A
MTZJ-T-24A
MTZJ-T-3.6
MTZJ-T-30
MTZJ-T-33B
MTZJ-T-39
MTZJ-T-5.1
MTZJ-T-5.1B
MTZJ-T-5.6
MTZJ-T-5.6B
MTZJ-T-7.5B
MTZJ-T-9.1B
RD10ESB2
RD11ES-B2
RD20ES-B2
RD24ES-B
RD3.6ES-B1
RD39ES-B2
RD5.1ES-B1
RD5.1ES-B2
RD5.6ESB2
11ES2



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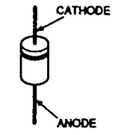

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D10SC4M

ERC06-15S
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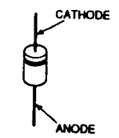

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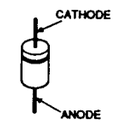

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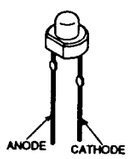


SECTION 7
EXPLODED VIEWS

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

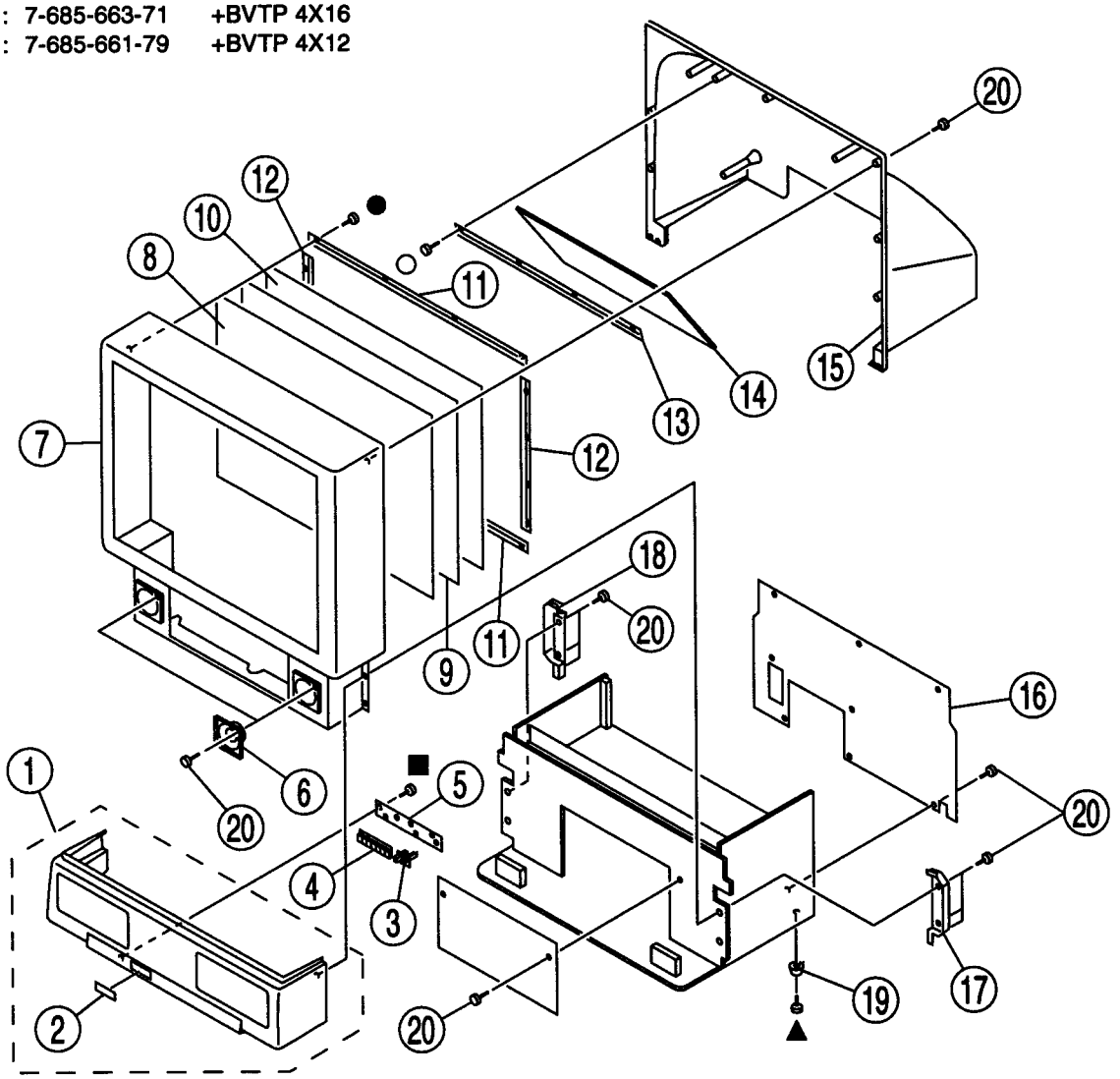
Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

7-1. COVER (KP-41T35)

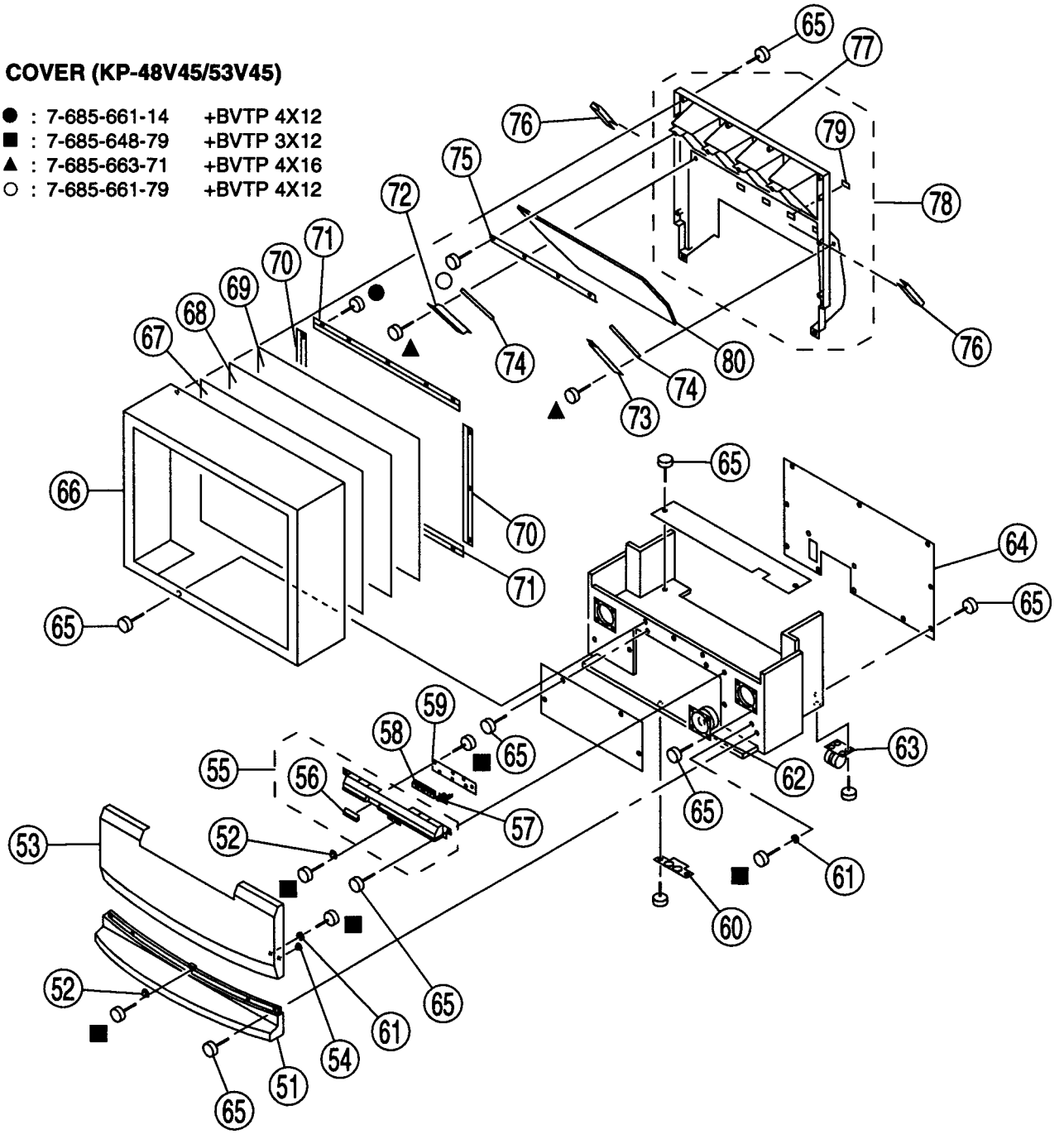
● : 7-685-661-14 +BVTP 4X12
■ : 7-685-648-79 +BVTP 3X12
▲ : 7-685-663-71 +BVTP 4X16
○ : 7-685-661-79 +BVTP 4X12



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	X-4034-531-1	CONTROL PANEL ASSY (PTG) (41)	21
2	4-057-605-21	DOOR, CONTROL	
3	4-057-604-01	GUIDE, LED / IR	
4	4-057-603-01	BUTTON, MULTI	
5	* A-1372-304-A	HA BOARD, COMPLETE	
6	1-505-378-11	SPEAKER (10CM)	
7	X-4034-534-1	BEZNET ASSY (41)	
8	4-034-053-01	PLATE (L), DIFFUSION	
9	4-047-943-11	PLATE (F), DIFFUSION	
10	4-059-006-11	SCREEN (41), CONTRAST	
11	* 4-059-007-01	HOLDER (H4.4), SCREEN	
12	* 4-059-011-01	HOLDER (H4.0), SCREEN	
13	* 4-037-351-01	HOLDER, MIRROR	
14	4-047-861-01	MIRROR (41), REFLECTION	
15	X-4032-607-1	COVER, MIRROR	
16	* 4-059-014-01	BOARD (41), REAR	
17	4-057-601-01	CAP (R), CONTROL PANEL	
18	4-057-600-01	CAP (L), CONTROL PANEL	
19	4-057-611-01	FOOT	
20	4-041-164-11	SCREW (4X20), TAPPING	

7-2. COVER (KP-48V45/53V45)

● : 7-685-661-14 +BVTP 4X12
■ : 7-685-648-79 +BVTP 3X12
▲ : 7-685-663-71 +BVTP 4X16
○ : 7-685-661-79 +BVTP 4X12

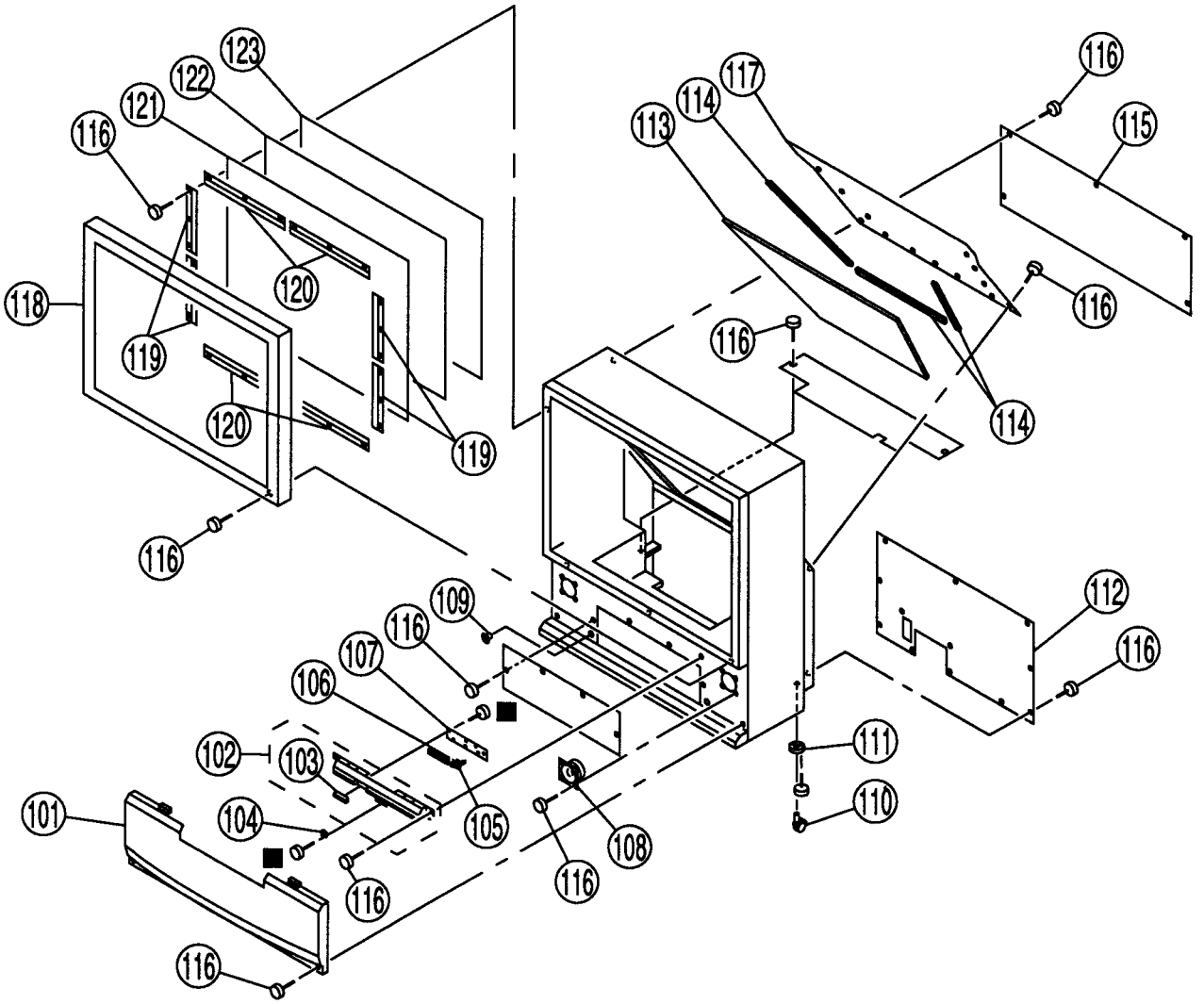


REF. NO.	PART NO.	DESCRIPTION	REMARK
51	4-057-608-01	SKIRT, FRONT	
52	4-843-806-00	STRIKE	
53	X-4034-498-1	GRILLE ASSY, SPEAKER	
54	4-838-438-00	LATCH	
55	X-4034-499-1	PANEL ASSY, CONTROL	56
56	4-057-605-01	DOOR, CONTROL	
57	4-057-604-01	GUIDE, LED / IR	
58	4-057-603-01	BUTTON, MULTI	
59	* A-1372-304-A	HA BOARD, COMPLETE	
60	4-048-175-01	FOOT, PLASTIC	
61	4-058-745-01	VELCRO	
62	1-505-426-11	SPEAKER (10.6CM)	
63	4-040-755-01	CASTER (DIA. 30)	
64	* 4-057-844-01	BOARD (53), REAR (53V45)	
	* 4-058-556-01	BOARD (48), REAR (48V45)	
65	4-041-164-11	SCREW (4X20), TAPPING	
66	X-4032-999-2	BEZNET ASSY (53V) (53V45)	
	X-4034-438-1	BEZNET ASSY (48) (48V45)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
67	4-036-466-11	PLATE (L), DIFFUSION (53V45)	
	4-058-454-11	PLATE (L), DIFFUSION (48V45)	
68	4-036-469-11	PLATE (F), DIFFUSION (53V45)	
	4-058-455-11	PLATE (F), DIFFUSION (48V45)	
69	4-058-894-11	SCREEN (53), CONTRAST (53V45)	
	4-058-932-01	SCREEN (48), CONTRAST (48V45)	
70	* 4-058-892-01	HOLDER (S), SCREEN (48V45)	
71	* 4-058-893-01	HOLDER (L), SCREEN	
72	* 4-051-790-02	HOLDER, MIRSD (L)	
73	* 4-051-789-02	HOLDER, MIRSD (R)	
74	* 4-049-098-01	CUSHION	
75	* 4-037-351-01	HOLDER, MIRROR	
76	4-033-775-41	PROTECTOR, MIRROR (53V45)	
77	* 4-057-610-01	COVER, MIRROR (48V45)	
78	X-4032-620-1	COVER ASSY, MIRROR (53V45)	79
79	4-048-150-01	CAP, HOLE	
80	4-058-889-01	MIRROR (53), REFLECTION (53V45)	
	4-058-930-01	MIRROR (48), REFLECTION (48V45)	

7-3. COVER (KP-61V45)

■ : 7-685-648-79 +BVTP 3X12



REF. NO.	PART NO.	DESCRIPTION	REMARK
101	X-4034-529-1	GRILLE ASSY, SPEAKER	
102	X-4034-499-1	PANEL ASSY, CONTROL	
103	4-057-605-01	DOOR, CONTROL	
104	4-843-806-00	STRIKE	
105	4-057-604-01	GUIDE, LED / IR	
106	4-057-603-01	BUTTON, MULTI	
107	* A-1372-304-A	HA BOARD, COMPLETE	
108	1-505-426-11	SPEAKER (10.6CM)	
109	4-838-438-00	LATCH	
110	4-040-508-01	CASTER	
111	4-030-850-01	SOCKET, CASTER	

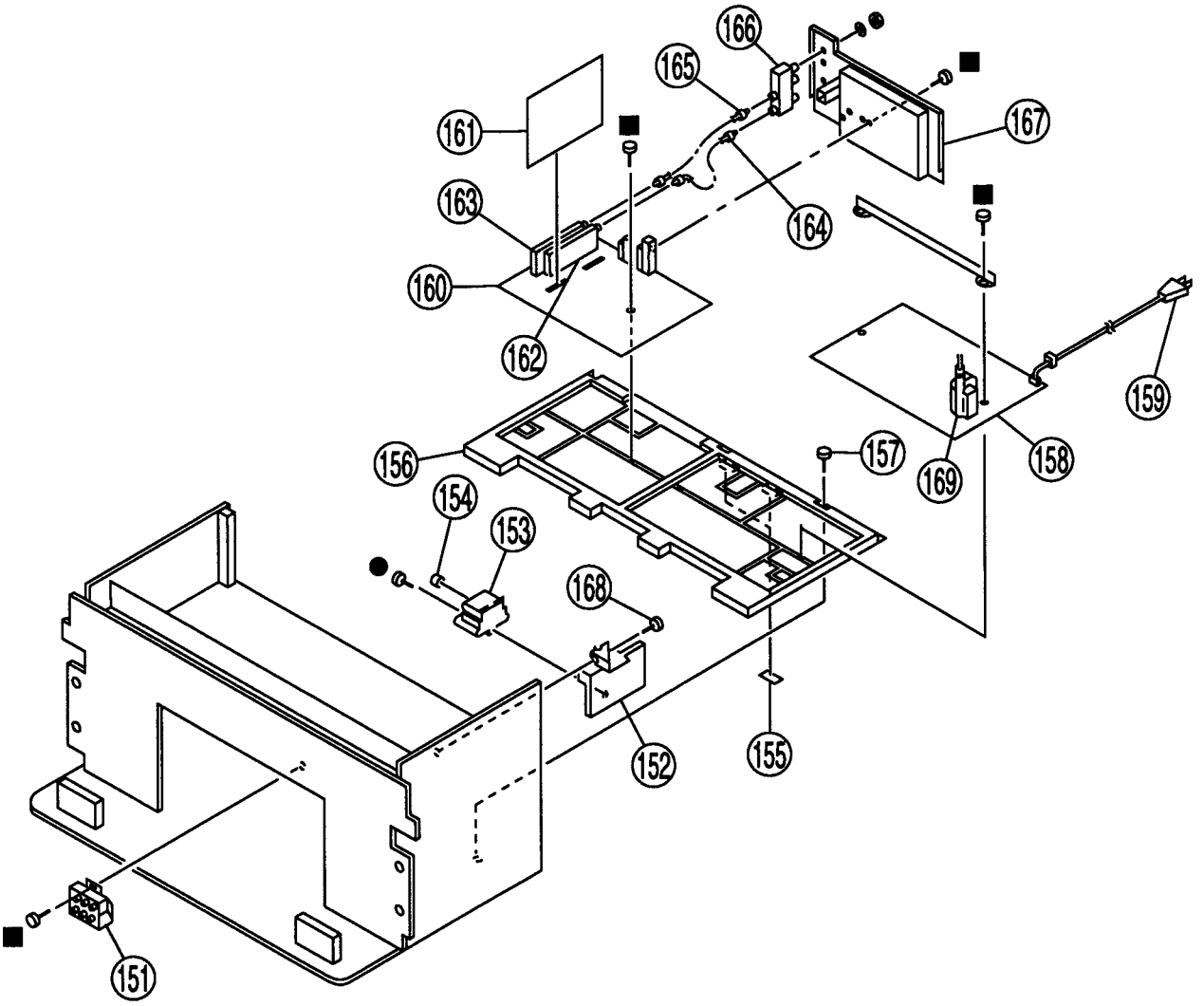
REF. NO.	PART NO.	DESCRIPTION	REMARK
112	* 4-058-640-01	BOARD, REAR	
113	4-058-871-01	MIRROR (61), REFLECTION	
114	4-059-099-01	FORM, SPACER	
115	* 4-058-641-01	COVER, TOP REAR	
116	4-041-164-11	SCREW (4X20), TAPPING	
117	* 4-058-642-01	BOARD, MIRROR	
118	X-4032-762-1	FRAME ASSY, SCREEN	
119	4-044-727-01	HOLDER (S), SCREEN	
120	4-044-726-01	HOLDER (L), SCREEN	
121	4-040-124-11	PLATE (L), DIFFUSION	
122	4-040-123-11	PLATE (F), DIFFUSION	
123	4-044-725-11	SCREEN (61), CONTRAST	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

7-4. CHASSIS (KP-41T35)

● : 7-685-661-14 +BVTP 4X12
■ : 7-685-648-79 +BVTP 3X12



REF. NO.	PART NO.	DESCRIPTION	REMARK
151	⚠1-223-975-12	RESISTOR ASSY (HIGH-VOLTAGE)	
152	*4-057-596-01	BRACKET, HV	
153	⚠8-598-955-11	BLOCK ASSY, HIGH-VOLTAGE	
154	4-373-137-01	CAP (Z), RUBBER	
155	*3-551-305-21	CUSHION, PANEL	
156	*4-057-594-01	BRACKET, MAIN	
157	4-052-894-01	SCREW (4X20), HEAD TAPPING	
158	*A-1316-317-A	G BOARD, COMPLETE	
159	⚠1-769-837-11	CORD, POWER(WITH NOISE FILTER)	
160	*A-1298-072-A	A BOARD, COMPLETE	

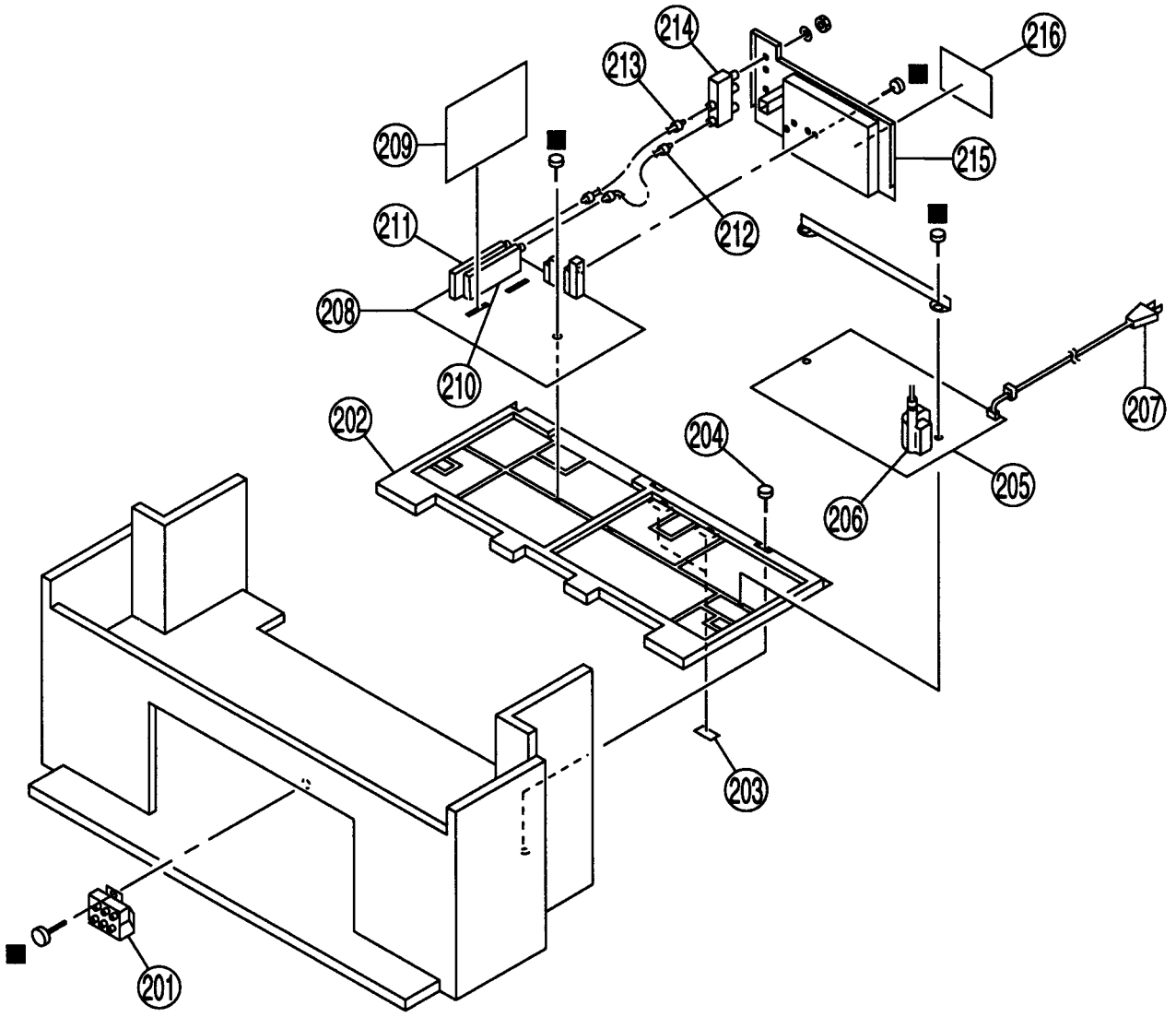
REF. NO.	PART NO.	DESCRIPTION	REMARK
161	*A-1190-265-A	PT BOARD, COMPLETE	
162	⚠8-598-339-00	TUNER BTF-LA402	
163	⚠8-598-340-00	TUNER BTF-WA404	
164	*1-557-056-41	CABLE, P-P	
165	1-556-945-21	CABLE, P-P	
166	8-598-414-00	ANTENNA SWITCH AS-2F	
167	4-057-595-21	TERMINAL BOARD	
168	4-041-164-11	SCREW (4X20), TAPPING	
169	⚠1-453-248-11	TRANSFORMER ASSY, FLYBACK	(NX-4007/X4T4)

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

7-5. CHASSIS (KP-48V45/53V45/61V45)

■ : 7-685-648-79 +BVTP 3X12



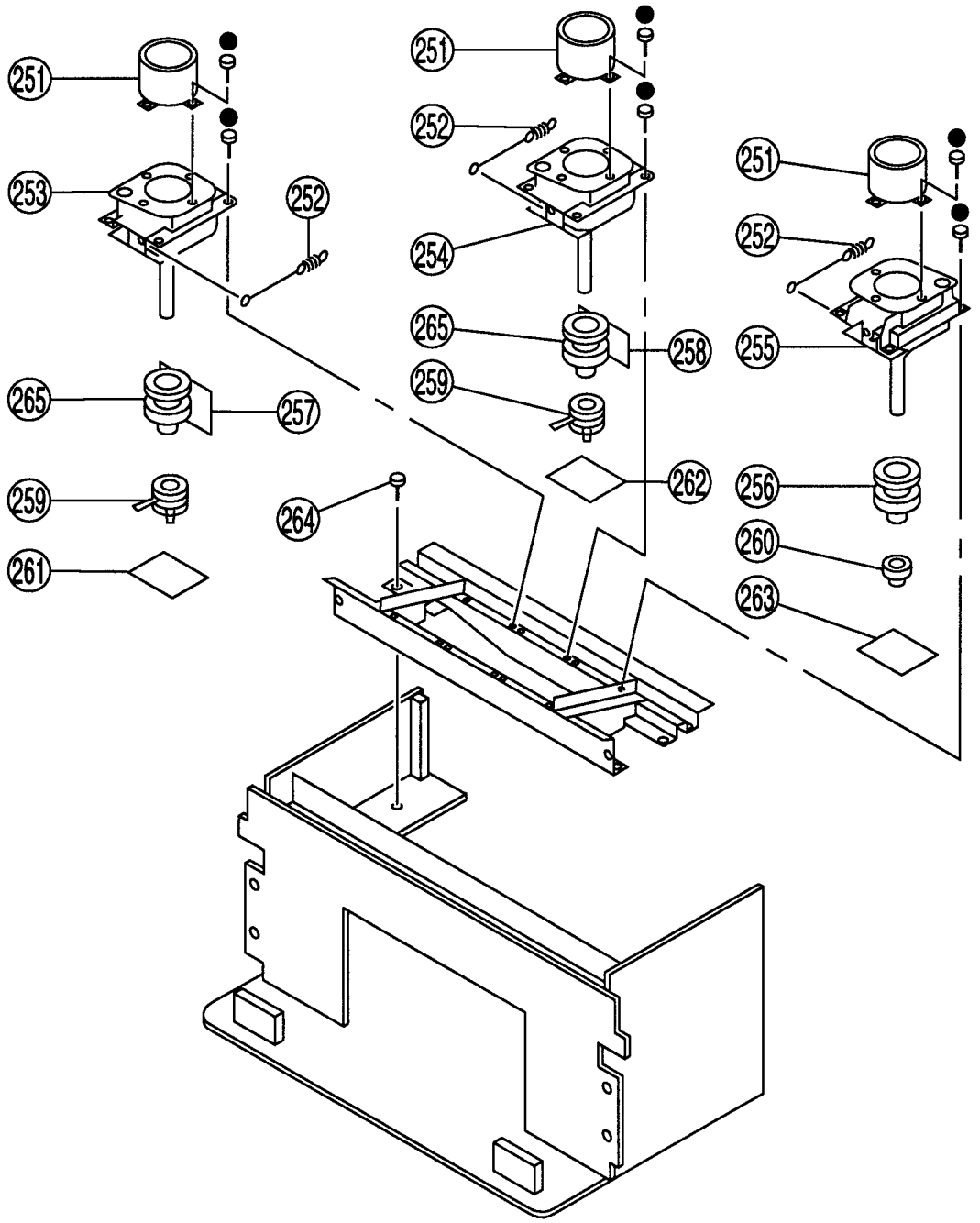
REF. NO.	PART NO.	DESCRIPTION	REMARK
201	⚠ 1-223-925-12	RESISTOR ASSY (HIGH-VOLTAGE)	
202	* 4-057-594-01	BRACKET, MAIN	
203	* 3-551-305-21	CUSHION, PANEL	
204	4-052-894-01	SCREW (4X20), HEAD TAPPING	
205	* A-1316-313-A	G BOARD, COMPLETE (53V45)	
	* A-1316-314-A	G BOARD, COMPLETE (48V45/61V45)	
206	⚠ 1-453-238-11	TRANSFORMER ASSY, FLYBACK (NX/400//X4A4)	
207	⚠ 1-769-837-11	CORD, POWER(WITH NOISE FILTER)	
208	* A-1298-067-A	A BOARD, COMPLETE	
209	* A-1190-264-A	PV BOARD, COMPLETE	
210	⚠ 8-598-339-00	TUNER BTF-LA402	
211	⚠ 8-598-340-00	TUNER BTF-WA404	
212	* 1-557-056-41	CABLE, P-P	
213	1-556-945-21	CABLE, P-P	
214	8-598-414-00	ANTENNA SWITCH AS-2F	
215	4-057-595-11	TERMINAL BOARD	
216	4-058-896-01	LABEL, TERMINAL	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

7-6. PICTURE TUBE (KP-41T35)

● : 7-685-661-14 +BVTP 4X12



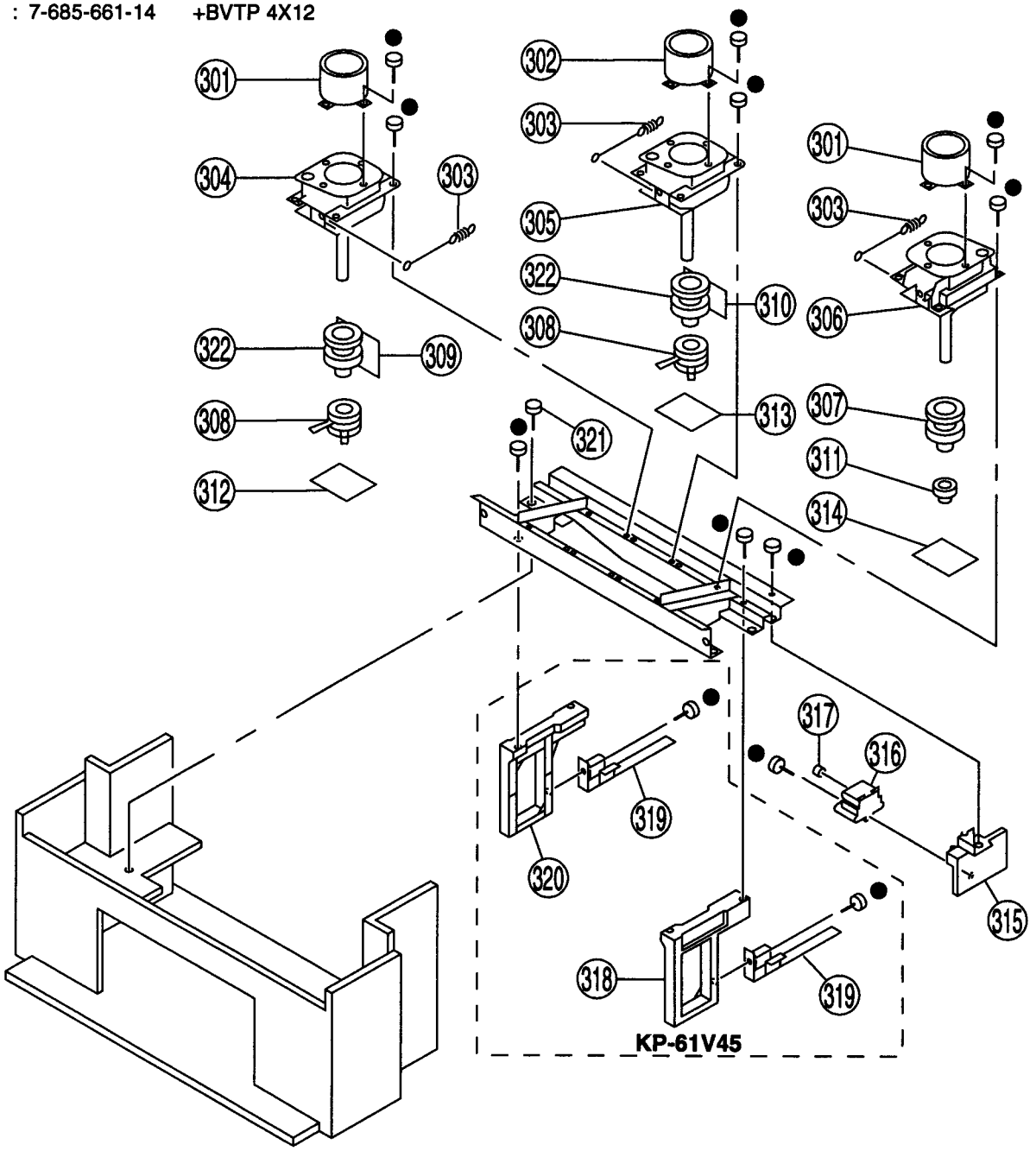
REF. NO.	PART NO.	DESCRIPTION	REMARK
251	4-056-258-01	LENS (DELTA 78)	
252	4-057-007-01	SPRING, TENSION	
253	⚠ A-1501-086-A	COUPLER (R) ASSY, PICTURE TUBE	
254	⚠ A-1501-169-A	COUPLER (G) ASSY, PICTURE TUBE	
255	⚠ A-1501-088-A	COUPLER (B) ASSY, PICTURE TUBE	
256	⚠ 1-451-455-21	DEFLECTION YOKE (B)	
257	* A-1390-682-A	ZR BOARD, COMPLETE	
258	* A-1390-683-A	ZG BOARD, COMPLETE	
259	⚠ 1-452-790-21	NECK ASSY	
260	1-452-909-11	MAGNET ASSY, 4 POLE	
261	* A-1331-670-A	CR BOARD, COMPLETE	
262	* A-1331-671-A	CG BOARD, COMPLETE	
263	* A-1331-672-A	CB BOARD, COMPLETE	
264	4-052-894-01	SCREW (4X20), HEAD TAPPING	
265	⚠ 1-451-454-11	DEFLECTION YOKE (R) (G)	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

7-7. PICTURE TUBE (KP-48V45/53V45/61V45)

● : 7-685-661-14 +BVTP 4X12



REF. NO.	PART NO.	DESCRIPTION	REMARK
301	4-040-131-01	LENS (LINNIT POINT 6) (61V45)	
	4-056-258-01	LENS (DELTA 78) (48V45/53V45)	
302	4-040-131-21	LENS (LINNIT POINT 6) (61V45)	
	4-056-258-01	LENS (DEL TA 78) (48V45/53V45)	
303	4-048-142-01	SPRING, TENSION	
304	⚠ 8-733-498-05	PICTURE TUBE 07MAC3(R) (LONG NECK) (GA) (48V45/53V45)	
	⚠ 8-733-508-05	PICTURE TUBE 07MAC4(R) (GC) (61V45)	
305	⚠ 8-733-494-05	PICTURE TUBE 07MAC2(G)(GC)	
306	⚠ 8-733-497-05	PICTURE TUBE 07MAC3(B) (LONG NECK) (GA) (48V45/53V45)	
	⚠ 8-733-507-05	PICTURE TUBE 07MAC4(B) (61V45)	
307	⚠ 1-451-455-21	DEFLECTION YOKE (B)	
308	⚠ 1-452-790-21	NECK ASSY	

REF. NO.	PART NO.	DESCRIPTION	REMARK
309	* A-1390-682-A	ZR BOARD, COMPLETE	
310	* A-1390-683-A	ZG BOARD, COMPLETE	
311	1-452-909-11	MAGNET ASSY, 4 POLE	
312	* A-1331-670-A	CR BOARD, COMPLETE	
313	* A-1331-671-A	CG BOARD, COMPLETE	
314	* A-1331-672-A	CB BOARD, COMPLETE	
315	* 4-057-596-01	BRACKET, HV	
316	⚠ 8-598-955-11	BLOCK ASSY, HIGH VOLTAGE	
317	4-373-137-01	CAP (Z), RUBBER	
318	4-057-613-01	BOARD (R), SIDE (61V45)	
319	4-058-638-01	STAY, CHASSIS (61V45)	
320	4-057-612-01	BOARD (L), SIDE (61V45)	
321	4-052-894-01	SCREW (4X20), HEAD TAPPING	
322	⚠ 1-451-454-11	DEFLECTION YOKE (R) (G)	

SECTION 8
ELECTRICAL PARTS LIST

PT

NOTE:

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

RESISTORS
- All resistors are in ohms
- F : nonflammable

- CAPACITORS
  PF : μμ F

- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION			REMARK
	*A-1190-265-A	PT BOARD, COMPLETE (KP-41T35) **********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C5001	1-104-664-11	ELECT	47MF	20%	25V
C5002	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5003	1-126-957-11	ELECT	0.22MF	20%	50V
C5004	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5005	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C5006	1-126-959-11	ELECT	0.47MF	20%	50V
C5007	1-126-961-11	ELECT	2.2MF	20%	50V
C5009	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C5010	1-126-934-11	ELECT	220MF	20%	16V
C5011	1-126-960-11	ELECT	1MF	20%	50V
C5012	1-126-959-11	ELECT	0.47MF	20%	50V
C5013	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5014	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5015	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C5016	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5017	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5018	1-126-934-11	ELECT	220MF	20%	16V
C5019	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5020	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5021	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5022	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C5023	1-126-964-11	ELECT	10MF	20%	50V
C5024	1-126-933-11	ELECT	100MF	20%	16V
C5025	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5051	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5052	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C5053	1-104-664-11	ELECT	47MF	20%	25V
C5054	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C5055	1-164-346-11	CERAMIC CHIP	1MF		16V
C5057	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C5058	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5062	1-104-664-11	ELECT	47MF	20%	25V
C5063	1-104-664-11	ELECT	47MF	20%	25V
C5064	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C5065	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C5066	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5067	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5068	1-126-960-11	ELECT	1MF	20%	50V
C5069	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5070	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5071	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5072	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5073	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C5076	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5077	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C5078	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5079	1-104-664-11	ELECT	47MF	20%	25V
C5080	1-126-960-11	ELECT	1MF	20%	50V
C5101	1-104-664-11	ELECT	47MF	20%	25V
C5102	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5103	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5104	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5105	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C5106	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5107	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C5108	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5109	1-126-964-11	ELECT	10MF	20%	50V
C5110	1-126-964-11	ELECT	10MF	20%	50V
C5111	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C5112	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5113	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C5114	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C5115	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C5117	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C5118	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5120	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C5121	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5122	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C5123	1-126-960-11	ELECT	1MF	20%	50V
C5124	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5125	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5126	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C5127	1-104-664-11	ELECT	47MF	20%	25V
C5129	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5130	1-104-664-11	ELECT	47MF	20%	25V
C5131	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5132	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C5133	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5134	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5135	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5136	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5137	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5138	1-104-664-11	ELECT	47MF	20%	25V
C5139	1-126-964-11	ELECT	10MF	20%	50V
C5140	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5141	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5142	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5143	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5144	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5145	1-126-964-11	ELECT	10MF	20%	50V
C5146	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C5147	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5148	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C5149	1-104-664-11	ELECT	47MF	20%	25V
C5150	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5151	1-104-664-11	ELECT	47MF	20%	25V
C5152	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C5153	1-104-664-11	ELECT	47MF	20%	25V
C5154	1-104-664-11	ELECT	47MF	20%	25V
C5157	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

PT

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<CONNECTOR>	
CN5051	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P	
CN5101	1-770-156-21	CONNECTOR, BOARD TO BOARD 8P	
		<DIODE>	
D5053	8-719-404-49	DIODE MA111	
		<FERRITE BEAD>	
FB5051	1-414-135-11	INDUCTOR CHIP 0UH	
FB5052	1-414-135-11	INDUCTOR CHIP 0UH	
FB5053	1-414-135-11	INDUCTOR CHIP 0UH	
FB5101	1-414-135-11	INDUCTOR CHIP 0UH	
FB5102	1-414-135-11	INDUCTOR CHIP 0UH	
FB5103	1-414-135-11	INDUCTOR CHIP 0UH	
FB5104	1-414-135-11	INDUCTOR CHIP 0UH	
FB5105	1-414-135-11	INDUCTOR CHIP 0UH	
FB5106	1-414-135-11	INDUCTOR CHIP 0UH	
FB5107	1-414-135-11	INDUCTOR CHIP 0UH	
FB5108	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB5109	1-414-135-11	INDUCTOR CHIP 0UH	
FB5110	1-414-135-11	INDUCTOR CHIP 0UH	
FB5111	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
		<FILTER>	
FL5101	1-239-847-11	FILTER, LOW PASS	
FL5102	1-239-847-11	FILTER, LOW PASS	
FL5103	1-239-847-11	FILTER, LOW PASS	
		<IC>	
IC5001	8-752-078-83	IC CXA2019Q	
IC5052	8-759-438-61	IC SDA9288X-A141	
IC5101	8-752-375-30	IC CXD2043Q	
IC5102	8-752-062-80	IC CXA1686M	
IC5103	8-759-701-56	IC NJM78M05FA	
		<COIL>	
L5001	1-410-478-11	INDUCTOR 47UH	
L5002	1-410-478-11	INDUCTOR 47UH	
L5003	1-410-478-11	INDUCTOR 47UH	
L5004	1-410-478-11	INDUCTOR 47UH	
L5052	1-410-473-11	INDUCTOR 18UH	
L5101	1-410-470-11	INDUCTOR 10UH	
L5102	1-410-476-11	INDUCTOR 33UH	
L5103	1-410-470-11	INDUCTOR 10UH	
L5105	1-410-470-11	INDUCTOR 10UH	
		<TRANSISTOR>	
Q5001	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5002	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5003	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5004	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5005	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5051	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5052	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5053	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5054	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5055	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5056	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5057	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5101	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5102	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5103	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5104	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5105	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5106	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5107	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5108	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q5109	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5110	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5111	8-729-216-22	TRANSISTOR 2SA1162-G	
Q5112	8-729-422-27	TRANSISTOR 2SD601A-Q	
		<RESISTOR>	
R5001	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5002	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R5003	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R5004	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5005	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5006	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5007	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5008	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
R5009	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5010	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R5011	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R5012	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5013	1-216-053-00	METAL GLAZE 1.5K 5% 1/10W	
R5014	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5015	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5016	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5017	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5018	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5019	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R5021	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5022	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R5023	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5024	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5025	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R5026	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R5027	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5029	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R5033	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5051	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R5052	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5053	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R5054	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R5055	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5056	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R5057	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5058	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5059	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5060	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5061	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R5062	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5063	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5073	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5074	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R5075	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R5076	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R5077	1-216-047-91	METAL GLAZE 820 5% 1/10W	
R5078	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5079	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5080	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R5081	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5082	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R5084	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5085	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R5087	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R5089	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R5090	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5091	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R5092	1-216-025-91	METAL GLAZE 100 5% 1/10W	

PT PV

REF. NO.	PART NO.	DESCRIPTION			REMARK
R5102	1-216-295-91	CONDUCTOR, CHIP			
R5103	1-216-047-91	METAL GLAZE 820		5%	1/10W
R5104	1-216-295-91	CONDUCTOR, CHIP			
R5106	1-216-035-00	METAL GLAZE 270		5%	1/10W
R5107	1-216-097-91	METAL GLAZE 100K		5%	1/10W
R5108	1-216-065-00	METAL GLAZE 4.7K		5%	1/10W
R5109	1-208-776-11	METAL GLAZE 560		0.50%	1/10W
R5110	1-208-774-11	METAL GLAZE 470		0.50%	1/10W
R5112	1-216-049-91	METAL GLAZE 1K		5%	1/10W
R5113	1-216-043-91	METAL GLAZE 560		5%	1/10W
R5114	1-216-073-00	METAL GLAZE 10K		5%	1/10W
R5115	1-216-049-91	METAL GLAZE 1K		5%	1/10W
R5116	1-216-043-91	METAL GLAZE 560		5%	1/10W
R5117	1-216-049-91	METAL GLAZE 1K		5%	1/10W
R5118	1-216-071-00	METAL GLAZE 8.2K		5%	1/10W
R5120	1-208-766-11	METAL GLAZE 220		0.50%	1/10W
R5121	1-216-041-00	METAL GLAZE 470		5%	1/10W
R5122	1-216-049-91	METAL GLAZE 1K		5%	1/10W
R5124	1-216-025-91	METAL GLAZE 100		5%	1/10W
R5127	1-216-069-00	METAL GLAZE 6.8K		5%	1/10W
R5128	1-216-075-00	METAL GLAZE 12K		5%	1/10W
R5129	1-216-043-91	METAL GLAZE 560		5%	1/10W
R5130	1-216-075-00	METAL GLAZE 12K		5%	1/10W
R5132	1-216-043-91	METAL GLAZE 560		5%	1/10W
R5133	1-216-081-00	METAL GLAZE 22K		5%	1/10W
R5134	1-216-081-00	METAL GLAZE 22K		5%	1/10W
R5135	1-216-081-00	METAL GLAZE 22K		5%	1/10W
R5136	1-216-081-00	METAL GLAZE 22K		5%	1/10W
R5137	1-208-766-11	METAL GLAZE 220		0.50%	1/10W
R5138	1-208-794-11	METAL GLAZE 3.3K		0.50%	1/10W
R5139	1-208-794-11	METAL GLAZE 3.3K		0.50%	1/10W
R5140	1-216-041-00	METAL GLAZE 470		5%	1/10W
R5141	1-216-033-00	METAL GLAZE 220		5%	1/10W
R5142	1-216-041-00	METAL GLAZE 470		5%	1/10W
R5143	1-216-033-00	METAL GLAZE 220		5%	1/10W
R5144	1-216-067-00	METAL GLAZE 5.6K		5%	1/10W
R5145	1-216-035-00	METAL GLAZE 270		5%	1/10W
R5146	1-216-035-00	METAL GLAZE 270		5%	1/10W
R5147	1-208-788-11	METAL GLAZE 1.8K		0.50%	1/10W
R5148	1-208-788-11	METAL GLAZE 1.8K		0.50%	1/10W
R5149	1-216-043-91	METAL GLAZE 560		5%	1/10W
R5150	1-208-794-11	METAL GLAZE 3.3K		0.50%	1/10W
R5151	1-208-794-11	METAL GLAZE 3.3K		0.50%	1/10W
R5152	1-216-025-91	METAL GLAZE 100		5%	1/10W
R5156	1-216-025-91	METAL GLAZE 100		5%	1/10W
R5157	1-216-025-91	METAL GLAZE 100		5%	1/10W
R5158	1-216-025-91	METAL GLAZE 100		5%	1/10W
R5159	1-216-025-91	METAL GLAZE 100		5%	1/10W
R5160	1-216-025-91	METAL GLAZE 100		5%	1/10W
R5161	1-216-025-91	METAL GLAZE 100		5%	1/10W
R5163	1-216-025-91	METAL GLAZE 100		5%	1/10W

<CRYSTAL>

X5001	1-577-611-11	OSCILALTOR, CERAMIC
X5002	1-567-505-11	OSCILLATOR, CRYSTAL
X5051	1-760-095-21	VIBRATOR, CRYSTAL
X5101	1-567-878-11	VIBRATOR, CRYSTAL
X5102	1-577-611-11	OSCILALTOR, CERAMIC

****

REF. NO.	PART NO.	DESCRIPTION			REMARK
	* A-1190-264-A	PV BOARD, COMPLETE (except KP-41T35)			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			

<CAPACITOR>

C3001	1-104-664-11	ELECT	47MF	20%	25V
C3002	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3003	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3004	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3005	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3006	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C3007	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3008	1-126-963-11	ELECT	4.7MF	20%	50V
C3009	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3010	1-126-934-11	ELECT	220MF	20%	16V
C3011	1-126-960-11	ELECT	1MF	20%	50V
C3012	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C3013	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3014	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3015	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C3016	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3017	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3018	1-126-934-11	ELECT	220MF	20%	16V
C3019	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3020	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3021	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3022	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C3023	1-126-964-11	ELECT	10MF	20%	50V
C3024	1-126-933-11	ELECT	100MF	20%	16V
C3025	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3026	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3101	1-104-664-11	ELECT	47MF	20%	25V
C3102	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3103	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3104	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3105	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3106	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3107	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C3108	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3109	1-126-964-11	ELECT	10MF	20%	50V
C3110	1-126-964-11	ELECT	10MF	20%	50V
C3111	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C3112	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3113	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3114	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C3115	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C3117	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3118	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3120	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C3121	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3122	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C3123	1-126-960-11	ELECT	1MF	20%	50V
C3124	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3125	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3126	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3127	1-104-664-11	ELECT	47MF	20%	25V
C3129	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3130	1-104-664-11	ELECT	47MF	20%	25V
C3131	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3132	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C3133	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3134	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3135	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3136	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3137	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3138	1-104-664-11	ELECT	47MF	20%	25V
C3139	1-126-964-11	ELECT	10MF	20%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C3140	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3141	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3142	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3143	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3144	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3145	1-126-964-11	ELECT	10MF	20%	50V
C3146	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3147	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3148	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3149	1-104-664-11	ELECT	47MF	20%	25V
C3150	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3151	1-104-664-11	ELECT	47MF	20%	25V
C3152	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C3153	1-104-664-11	ELECT	47MF	20%	25V
C3154	1-104-664-11	ELECT	47MF	20%	25V
C3157	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3201	1-104-664-11	ELECT	47MF	20%	25V
C3202	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3203	1-104-664-11	ELECT	47MF	20%	25V
C3204	1-104-664-11	ELECT	47MF	20%	25V
C3205	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3206	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3207	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C3208	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C3209	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C3210	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C3211	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3212	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3214	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3215	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3216	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C3217	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3218	1-126-960-11	ELECT	1MF	20%	50V
C3219	1-164-005-11	CERAMIC CHIP	0.47MF		16V
C3220	1-126-934-11	ELECT	220MF	20%	16V
C3221	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3222	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3223	1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C3224	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3225	1-164-346-11	CERAMIC CHIP	1MF		16V
C3226	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3227	1-126-934-11	ELECT	220MF	20%	16V
C3228	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3229	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3231	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3232	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3233	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3235	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3236	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3237	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3238	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3239	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3240	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3241	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3242	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3243	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3244	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3245	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3246	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3247	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3248	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3249	1-164-346-11	CERAMIC CHIP	1MF		16V
C3250	1-164-346-11	CERAMIC CHIP	1MF		16V
C3251	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3252	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3253	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3254	1-164-346-11	CERAMIC CHIP	1MF		16V
C3255	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3256	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3257	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3258	1-164-346-11	CERAMIC CHIP	1MF		16V
C3259	1-164-346-11	CERAMIC CHIP	1MF		16V
C3260	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C3261	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C3262	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3263	1-126-964-11	ELECT	10MF	20%	50V
C3267	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C3268	1-104-664-11	ELECT	47MF	20%	25V
C3269	1-104-664-11	ELECT	47MF	20%	25V
C3270	1-126-933-11	ELECT	100MF	20%	16V
C3271	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3272	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C3283	1-126-963-11	ELECT	4.7MF	20%	50V
C3284	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3285	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3286	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C3288	1-163-038-91	CERAMIC CHIP	0.1MF		25V

<FILTER BLOCK>

CM3201	1-467-554-21	FILTER BLOCK, COMB

<CONNECTOR>

CN3051	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P
CN3101	1-770-156-21	CONNECTOR, BOARD TO BOARD 8P

<DIODE>

D3002	8-719-404-49	DIODE MA111
D3204	8-719-404-49	DIODE MA111

<FERRITE BEAD>

FB3101	1-414-135-11	INDUCTOR CHIP 0UH
FB3102	1-414-135-11	INDUCTOR CHIP 0UH
FB3103	1-414-135-11	INDUCTOR CHIP 0UH
FB3104	1-414-135-11	INDUCTOR CHIP 0UH
FB3105	1-414-135-11	INDUCTOR CHIP 0UH
FB3106	1-414-135-11	INDUCTOR CHIP 0UH
FB3107	1-414-135-11	INDUCTOR CHIP 0UH
FB3108	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB3109	1-414-135-11	INDUCTOR CHIP 0UH
FB3110	1-414-135-11	INDUCTOR CHIP 0UH
FB3111	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB3202	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB3203	1-414-135-11	INDUCTOR CHIP 0UH
FB3204	1-414-135-11	INDUCTOR CHIP 0UH
FB3205	1-414-135-11	INDUCTOR CHIP 0UH
FB3206	1-414-135-11	INDUCTOR CHIP 0UH
FB3207	1-414-135-11	INDUCTOR CHIP 0UH
FB3208	1-414-135-11	INDUCTOR CHIP 0UH
FB3209	1-414-135-11	INDUCTOR CHIP 0UH
FB3210	1-414-135-11	INDUCTOR CHIP 0UH
FB3211	1-414-135-11	INDUCTOR CHIP 0UH
FB3212	1-414-135-11	INDUCTOR CHIP 0UH
FB3213	1-414-135-11	INDUCTOR CHIP 0UH
FB3214	1-414-135-11	INDUCTOR CHIP 0UH
FB3215	1-414-135-11	INDUCTOR CHIP 0UH
FB3216	1-414-135-11	INDUCTOR CHIP 0UH

<FILTER>

FL3101	1-239-847-11	FILTER, LOW PASS
FL3102	1-239-847-11	FILTER, LOW PASS
FL3103	1-239-847-11	FILTER, LOW PASS

PV

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<IC>	
IC3001	8-752-078-83	IC CXA2019Q	
IC3101	8-752-375-30	IC CXD2043Q	
IC3102	8-752-062-80	IC CXA1686M	
IC3103	8-759-701-75	IC NJM7805FA	
IC3201	8-759-351-59	IC TC528257J-80(EL)	
IC3202	8-752-078-83	IC CXA2019Q	
IC3203	8-759-477-28	IC SAB9076AH	
IC3204	8-759-300-71	IC HD14053BFP	
		<COIL>	
L3001	1-410-478-11	INDUCTOR 47UH	
L3002	1-410-478-11	INDUCTOR 47UH	
L3003	1-410-478-11	INDUCTOR 47UH	
L3004	1-410-478-11	INDUCTOR 47UH	
L3101	1-410-470-11	INDUCTOR 10UH	
L3102	1-410-476-11	INDUCTOR 33UH	
L3103	1-410-470-11	INDUCTOR 10UH	
L3105	1-410-470-11	INDUCTOR 10UH	
L3201	1-410-470-11	INDUCTOR 10UH	
L3202	1-408-413-00	INDUCTOR 22UH	
L3203	1-410-478-11	INDUCTOR 47UH	
L3204	1-410-478-11	INDUCTOR 47UH	
L3205	1-410-478-11	INDUCTOR 47UH	
L3206	1-410-478-11	INDUCTOR 47UH	
L3207	1-410-478-11	INDUCTOR 47UH	
		<TRANSISTOR>	
Q3001	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3002	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3003	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3004	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3005	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3006	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3101	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3102	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3103	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3104	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3105	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3106	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3107	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3108	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3109	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3110	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3111	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3112	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3201	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3202	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3203	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3204	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3205	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3206	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3207	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3208	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3209	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3210	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3211	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3212	8-729-216-22	TRANSISTOR 2SA1162-G	
Q3213	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3214	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q3217	8-729-422-27	TRANSISTOR 2SD601A-Q	
		<RESISTOR>	
R3001	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R3002	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
R3003	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
R3004	1-216-033-00	METAL GLAZE 220 5%	1/10W
R3005	1-216-025-91	METAL GLAZE 100 5%	1/10W
R3006	1-216-025-91	METAL GLAZE 100 5%	1/10W
R3007	1-216-025-91	METAL GLAZE 100 5%	1/10W
R3008	1-216-109-00	METAL GLAZE 330K 5%	1/10W
R3009	1-216-037-00	METAL GLAZE 330 5%	1/10W
R3010	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R3011	1-216-077-00	METAL GLAZE 15K 5%	1/10W
R3012	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R3013	1-216-053-00	METAL GLAZE 1.5K 5%	1/10W
R3014	1-216-025-91	METAL GLAZE 100 5%	1/10W
R3015	1-216-025-91	METAL GLAZE 100 5%	1/10W
R3016	1-216-025-91	METAL GLAZE 100 5%	1/10W
R3019	1-216-037-00	METAL GLAZE 330 5%	1/10W
R3021	1-216-041-00	METAL GLAZE 470 5%	1/10W
R3022	1-216-047-91	METAL GLAZE 820 5%	1/10W
R3023	1-216-041-00	METAL GLAZE 470 5%	1/10W
R3024	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R3025	1-216-075-00	METAL GLAZE 12K 5%	1/10W
R3026	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R3027	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R3030	1-208-774-11	METAL GLAZE 470 0.50%	1/10W
R3031	1-208-750-11	METAL GLAZE 47 0.50%	1/10W
R3032	1-208-774-11	METAL GLAZE 470 0.50%	1/10W
R3033	1-216-025-91	METAL GLAZE 100 5%	1/10W
R3034	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R3102	1-216-295-91	CONDUCTOR, CHIP	
R3103	1-216-047-91	METAL GLAZE 820 5%	1/10W
R3104	1-216-295-91	CONDUCTOR, CHIP	
R3106	1-216-035-00	METAL GLAZE 270 5%	1/10W
R3107	1-216-097-91	METAL GLAZE 100K 5%	1/10W
R3108	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
R3109	1-208-776-11	METAL GLAZE 560 0.50%	1/10W
R3110	1-208-774-11	METAL GLAZE 470 0.50%	1/10W
R3112	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R3113	1-216-043-91	METAL GLAZE 560 5%	1/10W
R3114	1-216-073-00	METAL GLAZE 10K 5%	1/10W
R3115	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R3116	1-216-043-91	METAL GLAZE 560 5%	1/10W
R3117	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R3118	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R3120	1-208-766-11	METAL GLAZE 220 0.50%	1/10W
R3121	1-216-041-00	METAL GLAZE 470 5%	1/10W
R3122	1-216-049-91	METAL GLAZE 1K 5%	1/10W
R3124	1-216-025-91	METAL GLAZE 100 5%	1/10W
R3127	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
R3128	1-216-075-00	METAL GLAZE 12K 5%	1/10W
R3129	1-216-043-91	METAL GLAZE 560 5%	1/10W
R3130	1-216-075-00	METAL GLAZE 12K 5%	1/10W
R3132	1-216-043-91	METAL GLAZE 560 5%	1/10W
R3133	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R3134	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R3135	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R3136	1-216-081-00	METAL GLAZE 22K 5%	1/10W
R3137	1-208-766-11	METAL GLAZE 220 0.50%	1/10W
R3138	1-208-794-11	METAL GLAZE 3.3K 0.50%	1/10W
R3139	1-208-794-11	METAL GLAZE 3.3K 0.50%	1/10W
R3140	1-216-041-00	METAL GLAZE 470 5%	1/10W
R3141	1-216-033-00	METAL GLAZE 220 5%	1/10W
R3142	1-216-041-00	METAL GLAZE 470 5%	1/10W
R3143	1-216-033-00	METAL GLAZE 220 5%	1/10W
R3144	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W
R3145	1-216-035-00	METAL GLAZE 270 5%	1/10W
R3146	1-216-035-00	METAL GLAZE 270 5%	1/10W
R3147	1-208-788-11	METAL GLAZE 1.8K 0.50%	1/10W
R3148	1-208-788-11	METAL GLAZE 1.8K 0.50%	1/10W
R3149	1-216-043-91	METAL GLAZE 560 5%	1/10W
R3150	1-208-794-11	METAL GLAZE 3.3K 0.50%	1/10W

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REF. NO.	PART NO.	DESCRIPTION		REMARK
R3151	1-208-794-11	METAL GLAZE 3.3K	0.50% 1/10W	
R3152	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3156	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3157	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3158	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3159	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3160	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3161	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3163	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3201	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W	
R3202	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W	
R3203	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3204	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3205	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W	
R3206	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3207	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3208	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3209	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	
R3210	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3211	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3212	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3213	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3214	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3215	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3216	1-216-033-00	METAL GLAZE 220	5% 1/10W	
R3217	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3218	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3219	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3220	1-216-109-00	METAL GLAZE 330K	5% 1/10W	
R3222	1-216-037-00	METAL GLAZE 330	5% 1/10W	
R3223	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3224	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3225	1-216-071-00	METAL GLAZE 8.2K	5% 1/10W	
R3226	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3227	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3228	1-216-077-00	METAL GLAZE 15K	5% 1/10W	
R3229	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3230	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3231	1-216-073-00	METAL GLAZE 10K	5% 1/10W	
R3232	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3233	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3234	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W	
R3235	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3236	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3237	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3238	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3239	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3240	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3241	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3242	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3245	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3246	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3247	1-216-041-00	METAL GLAZE 470	5% 1/10W	
R3248	1-216-037-00	METAL GLAZE 330	5% 1/10W	
R3249	1-216-041-00	METAL GLAZE 470	5% 1/10W	
R3250	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3251	1-216-047-91	METAL GLAZE 820	5% 1/10W	
R3252	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3253	1-216-041-00	METAL GLAZE 470	5% 1/10W	
R3254	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3255	1-216-075-00	METAL GLAZE 12K	5% 1/10W	
R3256	1-216-081-00	METAL GLAZE 22K	5% 1/10W	
R3257	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	
R3258	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3259	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3260	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3261	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W	
R3262	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3263	1-216-033-00	METAL GLAZE 220	5% 1/10W	

REF. NO.	PART NO.	DESCRIPTION		REMARK
R3264	1-216-033-00	METAL GLAZE 220	5% 1/10W	
R3265	1-216-033-00	METAL GLAZE 220	5% 1/10W	
R3266	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	
R3267	1-216-295-91	CONDUCTOR, CHIP		
R3268	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	
R3269	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3270	1-216-041-00	METAL GLAZE 470	5% 1/10W	
R3271	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W	
R3272	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3273	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W	
R3274	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	
R3276	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3277	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3278	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3279	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3280	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3281	1-208-774-11	METAL GLAZE 470	0.50% 1/10W	
R3282	1-208-750-11	METAL GLAZE 47	0.50% 1/10W	
R3283	1-208-774-11	METAL GLAZE 470	0.50% 1/10W	
R3284	1-216-295-91	CONDUCTOR, CHIP		
R3285	1-216-009-00	METAL GLAZE 22	5% 1/10W	
R3286	1-216-295-91	CONDUCTOR, CHIP		
R3287	1-216-009-00	METAL GLAZE 22	5% 1/10W	
R3288	1-216-295-91	CONDUCTOR, CHIP		
R3289	1-216-295-91	CONDUCTOR, CHIP		
R3290	1-216-295-91	CONDUCTOR, CHIP		
R3291	1-216-009-00	METAL GLAZE 22	5% 1/10W	
R3292	1-216-295-91	CONDUCTOR, CHIP		
R3293	1-216-295-91	CONDUCTOR, CHIP		
R3294	1-216-009-00	METAL GLAZE 22	5% 1/10W	
R3295	1-216-009-00	METAL GLAZE 22	5% 1/10W	
R3296	1-216-295-91	CONDUCTOR, CHIP		
R3297	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3298	1-216-295-91	CONDUCTOR, CHIP		
R3299	1-216-295-91	CONDUCTOR, CHIP		
R3307	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3308	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3309	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3311	1-216-049-91	METAL GLAZE 1K	5% 1/10W	
R3312	1-216-025-91	METAL GLAZE 100	5% 1/10W	
R3313	1-216-295-91	CONDUCTOR, CHIP		

<CRYSTAL>

X3001	1-577-611-11	OSCILALTOR, CERAMIC			
X3002	1-567-505-11	OSCILLATOR, CRYSTAL			
X3101	1-567-878-11	VIBRATOR, CRYSTAL			
X3102	1-577-611-11	OSCILALTOR, CERAMIC			
X3201	1-577-611-11	OSCILALTOR, CERAMIC			
X3202	1-567-505-11	OSCILLATOR, CRYSTAL			

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* A-1298-072-A A BOARD, COMPLETE (KP-41T35)
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4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C001	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C004	1-126-933-11	ELECT	100MF	20%	16V
C005	1-126-964-11	ELECT	10MF	20%	50V
C006	1-101-004-00	CERAMIC	0.01MF		50V
C017	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C018	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C019	1-126-960-11	ELECT	1MF	20%	50V
C021	1-163-243-11	CERAMIC CHIP	47PF	5%	50V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C024	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C025	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C026	1-107-693-11	ELECT	10MF	20%	16V
C027	1-126-935-11	ELECT	470MF	20%	16V
C028	1-107-693-11	ELECT	10MF	20%	16V
C032	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C033	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C034	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C035	1-104-664-11	ELECT	47MF	20%	25V
C036	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C037	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C038	1-126-960-11	ELECT	1MF	20%	50V
C045	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C046	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C047	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V
C048	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C054	1-163-033-91	CERAMIC CHIP	0.022MF		50V
C057	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C092	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C107	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C108	1-104-664-11	ELECT	47MF	20%	25V
C109	1-126-935-11	ELECT	470MF	20%	16V
C110	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C111	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C119	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C120	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C121	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C124	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C201	1-126-960-11	ELECT	1MF	20%	50V
C203	1-126-935-11	ELECT	470MF	20%	16V
C204	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C206	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C207	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C208	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C209	1-126-964-11	ELECT	10MF	20%	50V
C210	1-126-964-11	ELECT	10MF	20%	50V
C211	1-126-964-11	ELECT	10MF	20%	50V
C212	1-126-964-11	ELECT	10MF	20%	50V
C213	1-126-964-11	ELECT	10MF	20%	50V
C216	1-126-964-11	ELECT	10MF	20%	50V
C218	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C219	1-126-964-11	ELECT	10MF	20%	50V
C220	1-126-964-11	ELECT	10MF	20%	50V
C221	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C224	1-104-664-11	ELECT	47MF	20%	25V
C226	1-126-964-11	ELECT	10MF	20%	50V
C227	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C229	1-126-964-11	ELECT	10MF	20%	50V
C230	1-126-964-11	ELECT	10MF	20%	50V
C231	1-126-933-11	ELECT	100MF	20%	16V
C232	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C302	1-126-959-11	ELECT	0.47MF	20%	50V
C303	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C304	1-126-964-11	ELECT	10MF	20%	50V
C305	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C309	1-126-933-11	ELECT	100MF	20%	16V
C310	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C311	1-115-419-11	CERAMIC CHIP	3300PF	5%	25V
C312	1-126-959-11	ELECT	0.47MF	20%	50V
C313	1-137-399-11	FILM	0.1MF	5%	50V
C314	1-137-399-11	FILM	0.1MF	5%	50V
C315	1-137-399-11	FILM	0.1MF	5%	50V
C316	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C317	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C318	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C319	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C320	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C321	1-126-963-11	ELECT	4.7MF	20%	50V
C322	1-130-495-00	MYLAR	0.1MF	5%	50V
C323	1-137-581-11	FILM	0.1MF	5%	100V
C324	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C325	1-126-959-11	ELECT	0.47MF	20%	50V
C326	1-126-964-11	ELECT	10MF	20%	50V
C327	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C329	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C330	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C331	1-126-959-11	ELECT	0.47MF	20%	50V
C332	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C333	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C334	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C335	1-126-935-11	ELECT	470MF	20%	16V
C337	1-126-960-11	ELECT	1MF	20%	50V
C338	1-126-961-11	ELECT	2.2MF	20%	50V
C339	1-126-959-11	ELECT	0.47MF	20%	50V
C342	1-137-399-11	FILM	0.1MF	5%	50V
C344	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C349	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C351	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C401	1-126-964-11	ELECT	10MF	20%	50V
C402	1-126-964-11	ELECT	10MF	20%	50V
C403	1-137-367-11	FILM	0.0033MF	5%	50V
C404	1-137-367-11	FILM	0.0033MF	5%	50V
C405	1-137-372-11	FILM	0.022MF	5%	50V
C406	1-137-399-11	FILM	0.1MF	5%	50V
C407	1-126-960-11	ELECT	1MF	20%	50V
C408	1-137-367-11	FILM	0.0033MF	5%	50V
C409	1-137-367-11	FILM	0.0033MF	5%	50V
C410	1-137-372-11	FILM	0.022MF	5%	50V
C411	1-137-399-11	FILM	0.1MF	5%	50V
C412	1-126-933-11	ELECT	100MF	20%	16V
C413	1-128-551-11	ELECT	22MF	20%	25V
C414	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C415	1-126-964-11	ELECT	10MF	20%	50V
C416	1-126-964-11	ELECT	10MF	20%	50V
C417	1-126-964-11	ELECT	10MF	20%	50V
C418	1-104-664-11	ELECT	47MF	20%	25V
C422	1-104-664-11	ELECT	47MF	20%	25V
C424	1-126-961-11	ELECT	2.2MF	20%	50V
C425	1-126-935-11	ELECT	470MF	20%	16V
C426	1-126-964-11	ELECT	10MF	20%	50V
C427	1-126-933-11	ELECT	100MF	20%	16V
C428	1-126-969-11	ELECT	220MF	20%	50V
C429	1-126-967-11	ELECT	47MF	20%	50V
C430	1-126-964-11	ELECT	10MF	20%	50V
C431	1-126-969-11	ELECT	220MF	20%	50V
C432	1-136-173-00	FILM	0.47MF	5%	50V
C433	1-137-399-11	FILM	0.1MF	5%	50V
C434	1-128-550-11	ELECT	2200MF	20%	50V
C435	1-137-399-11	FILM	0.1MF	5%	50V
C436	1-128-548-11	ELECT	4700MF	20%	25V
C437	1-128-548-11	ELECT	4700MF	20%	25V
C440	1-126-964-11	ELECT	10MF	20%	50V
C441	1-126-964-11	ELECT	10MF	20%	50V
C1101	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1102	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1103	1-126-933-11	ELECT	100MF	20%	16V
C1104	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1105	1-126-960-11	ELECT	1MF	20%	50V
C1106	1-126-933-11	ELECT	100MF	20%	16V
C1107	1-104-664-11	ELECT	47MF	20%	25V
C1108	1-126-964-11	ELECT	10MF	20%	50V
C1109	1-126-933-11	ELECT	100MF	20%	16V
C1110	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1111	1-126-960-11	ELECT	1MF	20%	50V
C1112	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1113	1-126-964-11	ELECT	10MF	20%	50V

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C1114	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1115	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1116	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1117	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1118	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1119	1-126-968-11	ELECT	100MF	20%	50V
C1120	1-126-933-11	ELECT	100MF	20%	16V
C1122	1-104-664-11	ELECT	47MF	20%	25V
C1501	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1502	1-107-504-11	CERAMIC	10PF	0.5PF	500V
C1503	1-136-177-00	FILM	1MF	5%	50V
C1506	1-126-969-11	ELECT	220MF	20%	50V
C1507	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1508	1-137-378-11	FILM	0.22MF	5%	50V
C1509	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1510	1-126-942-61	ELECT	1000MF	20%	25V
C1511	1-126-942-61	ELECT	1000MF	20%	25V
C1513	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1514	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1517	1-126-964-11	ELECT	10MF	20%	50V
C1518	1-126-933-11	ELECT	100MF	20%	16V
C1519	1-126-933-11	ELECT	100MF	20%	16V
C1520	1-126-964-11	ELECT	10MF	20%	50V
C1521	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1522	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1523	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1524	1-137-150-11	MYLAR	0.01MF	10%	100V
C1601	1-126-933-11	ELECT	100MF	20%	16V
C1602	1-126-933-11	ELECT	100MF	20%	16V
C1603	1-126-916-11	ELECT	1000MF	20%	6.3V
C1604	1-126-934-11	ELECT	220MF	20%	16V
C1605	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1606	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1607	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1608	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1609	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1610	1-126-933-11	ELECT	100MF	20%	16V
C1611	1-163-031-11	CERAMIC CHIP	0.01MF		50V

<CONNECTOR>

CN001	*1-564-507-11	PLUG, CONNECTOR 4P
CN002	*1-564-511-11	PLUG, CONNECTOR 8P
CN003	*1-774-183-11	CONNECTOR, BOARD TOBOARD10P
CN004	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P
CN301	*1-774-183-11	CONNECTOR, BOARD TOBOARD10P
CN302	*1-564-508-11	PLUG, CONNECTOR 5P
CN303	*1-564-512-11	PLUG, CONNECTOR 9P
CN304	1-770-155-21	CONNECTOR, BOARD TO BOARD 8P
CN305	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P
CN401	*1-564-507-11	PLUG, CONNECTOR 4P
CN402	*1-564-506-11	PLUG, CONNECTOR 3P
CN403	*1-564-505-11	PLUG, CONNECTOR 2P
CN1101	*1-564-514-11	PLUG, CONNECTOR 11P
CN1501	*1-564-506-11	PLUG, CONNECTOR 3P
CN1601	*1-774-183-11	CONNECTOR, BOARD TOBOARD10P
CN1602	*1-774-183-11	CONNECTOR, BOARD TOBOARD10P

<DIODE>

D001	8-719-991-33	DIODE 1SS133T-77
D002	8-719-991-33	DIODE 1SS133T-77
D003	8-719-991-33	DIODE 1SS133T-77
D004	8-719-991-33	DIODE 1SS133T-77
D007	8-719-109-89	DIODE RD5.6ESB2
D010	8-719-109-89	DIODE RD5.6ESB2
D011	8-719-109-89	DIODE RD5.6ESB2
D202	8-719-110-17	DIODE RD10ESB2
D203	8-719-109-89	DIODE RD5.6ESB2
D206	8-719-977-28	DIODE DTZ10B
D207	8-719-977-28	DIODE DTZ10B
D208	8-719-977-28	DIODE DTZ10B
D209	8-719-977-28	DIODE DTZ10B
D210	8-719-977-28	DIODE DTZ10B
D211	8-719-977-28	DIODE DTZ10B
D212	8-719-977-28	DIODE DTZ10B
D213	8-719-977-28	DIODE DTZ10B
D214	8-719-110-17	DIODE RD10ESB2
D215	8-719-110-17	DIODE RD10ESB2
D216	8-719-110-17	DIODE RD10ESB2
D217	8-719-110-17	DIODE RD10ESB2
D218	8-719-110-17	DIODE RD10ESB2
D219	8-719-110-17	DIODE RD10ESB2
D220	8-719-110-17	DIODE RD10ESB2
D221	8-719-110-17	DIODE RD10ESB2
D222	8-719-110-17	DIODE RD10ESB2
D225	8-719-110-17	DIODE RD10ESB2
D226	8-719-110-17	DIODE RD10ESB2
D232	8-719-983-38	DIODE MTZJ-T-77-36B
D236	8-719-110-17	DIODE RD10ESB2
D237	8-719-110-17	DIODE RD10ESB2
D238	8-719-110-17	DIODE RD10ESB2
D239	8-719-991-33	DIODE 1SS133T-77
D240	8-719-991-33	DIODE 1SS133T-77
D241	8-719-991-33	DIODE 1SS133T-77
D303	8-719-991-33	DIODE 1SS133T-77
D305	8-719-110-17	DIODE RD10ESB2
D401	8-719-991-33	DIODE 1SS133T-77
D403	8-719-983-38	DIODE MTZJ-T-77-36B
D405	8-719-991-33	DIODE 1SS133T-77
D406	8-719-991-33	DIODE 1SS133T-77
D408	8-719-991-33	DIODE 1SS133T-77
D410	8-719-983-38	DIODE MTZJ-T-77-36B
D411	8-719-929-15	DIODE HZS9.1NB2
D1101	8-719-982-26	DIODE MTZJ-33B
D1102	8-719-977-28	DIODE DTZ10B
D1103	8-719-977-28	DIODE DTZ10B
D1104	8-719-977-28	DIODE DTZ10B
D1105	8-719-977-28	DIODE DTZ10B
D1106	8-719-977-28	DIODE DTZ10B
D1107	8-719-977-28	DIODE DTZ10B
D1501	8-719-109-89	DIODE RD5.6ESB2
D1502	8-719-908-03	DIODE GP08D

<FERRITE BEAD>

FB1102	1-414-135-11	INDUCTOR CHIP 0UH

<IC>

IC001	8-752-886-54	IC CXP85856A-002S
IC002	8-752-861-57	IC CXP85112B-613S
IC003	8-759-352-91	IC PST9143NL
IC004	8-759-352-91	IC PST9143NL
IC007	8-759-518-23	IC X24C04S8
IC201	8-759-366-78	IC MM1313AD
IC301	⚠8-752-076-76	IC CXA2025AS
IC401	8-759-369-39	IC BH3856FS-E2
IC402	8-759-100-96	IC uPC4558G2
IC403	8-759-089-13	IC TDA7262
IC1101	8-759-231-53	IC TA7805S
IC1501	8-759-192-71	IC STV9379
IC1502	8-759-251-31	IC CA0007AM
IC1601	8-759-198-03	IC PQ09RF21
IC1602	8-759-231-53	IC TA7805S

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REF. NO.	PART NO.	DESCRIPTION	REMARK
		<JACK>	
J203	1-507-667-00	JACK, MIC	
J205	1-774-750-11	JACK BLOCK, PIN	
J206	1-774-749-11	JACK BLOCK, PIN	
J208	1-774-749-11	JACK BLOCK, PIN	
J209	1-774-751-11	TERMINAL BLOCK, S	
		<CHIP CONDUCTOR>	
JR201	1-216-295-91	CONDUCTOR, CHIP	
JR202	1-216-295-91	CONDUCTOR, CHIP	
JR1501	1-216-295-91	CONDUCTOR, CHIP	
JR1502	1-216-295-91	CONDUCTOR, CHIP	
JR1601	1-216-295-91	CONDUCTOR, CHIP	
JR1603	1-216-295-91	CONDUCTOR, CHIP	
JR1604	1-216-295-91	CONDUCTOR, CHIP	
JR1605	1-216-295-91	CONDUCTOR, CHIP	
JR1607	1-216-295-91	CONDUCTOR, CHIP	
JR1609	1-216-295-91	CONDUCTOR, CHIP	
JR1610	1-216-295-91	CONDUCTOR, CHIP	
JR1611	1-216-295-91	CONDUCTOR, CHIP	
JR1612	1-216-295-91	CONDUCTOR, CHIP	
JR1613	1-216-295-91	CONDUCTOR, CHIP	
JR1614	1-216-295-91	CONDUCTOR, CHIP	
JR1615	1-216-295-91	CONDUCTOR, CHIP	
JR1617	1-216-295-91	CONDUCTOR, CHIP	
JR1619	1-216-295-91	CONDUCTOR, CHIP	
JR1620	1-216-295-91	CONDUCTOR, CHIP	
JR1621	1-216-295-91	CONDUCTOR, CHIP	
JR1622	1-216-295-91	CONDUCTOR, CHIP	
JR1623	1-216-295-91	CONDUCTOR, CHIP	
JR1624	1-216-295-91	CONDUCTOR, CHIP	
JR1625	1-216-295-91	CONDUCTOR, CHIP	
JR1626	1-216-295-91	CONDUCTOR, CHIP	
JR1627	1-216-295-91	CONDUCTOR, CHIP	
		<COIL>	
L002	1-410-482-31	INDUCTOR 100UH	
L003	1-410-482-31	INDUCTOR 100UH	
L004	1-216-295-91	CONDUCTOR, CHIP	
L005	1-216-295-91	CONDUCTOR, CHIP	
L006	1-410-470-11	INDUCTOR 10UH	
L007	1-410-482-31	INDUCTOR 100UH	
L201	1-410-478-11	INDUCTOR 47UH	
L302	1-410-482-31	INDUCTOR 100UH	
L303	1-410-470-11	INDUCTOR 10UH	
L1101	1-410-478-11	INDUCTOR 47UH	
L1103	1-410-478-11	INDUCTOR 47UH	
L1104	1-410-478-11	INDUCTOR 47UH	
L1105	1-410-470-11	INDUCTOR 10UH	
L1106	1-410-478-11	INDUCTOR 47UH	
L1501	1-412-524-11	INDUCTOR 8.2UH	
L1502	1-412-533-21	INDUCTOR 47UH	
L1503	1-412-533-21	INDUCTOR 47UH	
		<NEON LAMP>	
NL1501	1-519-108-99	LAMP, NEON	
		<IC LINK>	
PS401	1-532-984-11	LINK, IC (2A/90V)	
		<TRANSISTOR>	
Q001	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q002	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q003	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q005	8-729-216-22	TRANSISTOR 2SA1162-G	
Q006	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q007	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q008	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q009	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q013	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q015	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q016	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q017	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q201	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q206	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q207	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q209	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q213	8-729-216-22	TRANSISTOR 2SA1162-G	
Q214	8-729-216-22	TRANSISTOR 2SA1162-G	
Q216	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q217	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q218	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q219	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q220	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q226	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q301	8-729-216-22	TRANSISTOR 2SA1162-G	
Q302	8-729-216-22	TRANSISTOR 2SA1162-G	
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q304	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q305	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q306	8-729-216-22	TRANSISTOR 2SA1162-G	
Q307	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q308	8-729-216-22	TRANSISTOR 2SA1162-G	
Q311	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q312	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q313	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q314	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q402	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q403	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q405	8-729-216-22	TRANSISTOR 2SA1162-G	
Q406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q408	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q409	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q410	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q411	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q1101	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q1501	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2105	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2106	8-729-422-27	TRANSISTOR 2SD601A-Q	
		<RESISTOR>	
R003	1-216-295-91	CONDUCTOR, CHIP	
R004	1-216-033-00	METAL GLAZE 220	5% 1/10W
R005	1-216-033-00	METAL GLAZE 220	5% 1/10W
R006	1-216-033-00	METAL GLAZE 220	5% 1/10W
R007	1-216-081-00	METAL GLAZE 22K	5% 1/10W
R008	1-216-073-00	METAL GLAZE 10K	5% 1/10W
R009	1-216-033-00	METAL GLAZE 220	5% 1/10W
R010	1-216-033-00	METAL GLAZE 220	5% 1/10W
R011	1-216-033-00	METAL GLAZE 220	5% 1/10W
R012	1-216-033-00	METAL GLAZE 220	5% 1/10W
R013	1-216-033-00	METAL GLAZE 220	5% 1/10W
R014	1-216-033-00	METAL GLAZE 220	5% 1/10W
R015	1-216-025-91	METAL GLAZE 100	5% 1/10W
R016	1-216-025-91	METAL GLAZE 100	5% 1/10W
R017	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R018	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
R019	1-216-097-91	METAL GLAZE 100K	5% 1/10W
R020	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
R021	1-216-089-91	METAL GLAZE 47K	5% 1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R023	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R024	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R025	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R026	1-216-033-00	METAL GLAZE	220	5%	1/10W
R027	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R030	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R033	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R034	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R035	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R036	1-216-033-00	METAL GLAZE	220	5%	1/10W
R037	1-216-033-00	METAL GLAZE	220	5%	1/10W
R038	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R039	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R040	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R041	1-216-025-91	METAL GLAZE	100	5%	1/10W
R042	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R043	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R045	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R046	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R047	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R048	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R050	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R053	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R054	1-216-033-00	METAL GLAZE	220	5%	1/10W
R056	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R057	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R058	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R059	1-216-033-00	METAL GLAZE	220	5%	1/10W
R060	1-216-033-00	METAL GLAZE	220	5%	1/10W
R061	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R063	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R064	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R065	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R066	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R067	1-216-033-00	METAL GLAZE	220	5%	1/10W
R068	1-216-033-00	METAL GLAZE	220	5%	1/10W
R070	1-216-033-00	METAL GLAZE	220	5%	1/10W
R071	1-216-033-00	METAL GLAZE	220	5%	1/10W
R072	1-216-033-00	METAL GLAZE	220	5%	1/10W
R073	1-216-033-00	METAL GLAZE	220	5%	1/10W
R074	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R075	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R076	1-216-033-00	METAL GLAZE	220	5%	1/10W
R077	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R078	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R080	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R081	1-216-033-00	METAL GLAZE	220	5%	1/10W
R084	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R085	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R086	1-216-033-00	METAL GLAZE	220	5%	1/10W
R087	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R088	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R090	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R091	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R092	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R099	1-216-037-00	METAL GLAZE	330	5%	1/10W
R111	1-216-033-00	METAL GLAZE	220	5%	1/10W
R112	1-216-033-00	METAL GLAZE	220	5%	1/10W
R113	1-216-033-00	METAL GLAZE	220	5%	1/10W
R115	1-216-033-00	METAL GLAZE	220	5%	1/10W
R117	1-216-033-00	METAL GLAZE	220	5%	1/10W
R118	1-216-033-00	METAL GLAZE	220	5%	1/10W
R119	1-216-033-00	METAL GLAZE	220	5%	1/10W
R120	1-216-033-00	METAL GLAZE	220	5%	1/10W
R121	1-216-033-00	METAL GLAZE	220	5%	1/10W
R122	1-216-033-00	METAL GLAZE	220	5%	1/10W
R123	1-216-033-00	METAL GLAZE	220	5%	1/10W
R124	1-216-033-00	METAL GLAZE	220	5%	1/10W
R125	1-216-033-00	METAL GLAZE	220	5%	1/10W
R127	1-216-033-00	METAL GLAZE	220	5%	1/10W
R128	1-216-033-00	METAL GLAZE	220	5%	1/10W
R131	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R132	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R133	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R147	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R148	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R149	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R154	1-216-025-91	METAL GLAZE	100	5%	1/10W
R155	1-216-025-91	METAL GLAZE	100	5%	1/10W
R156	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R157	1-216-017-91	METAL GLAZE	47	5%	1/10W
R158	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R159	1-216-017-91	METAL GLAZE	47	5%	1/10W
R160	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R161	1-216-017-91	METAL GLAZE	47	5%	1/10W
R163	1-216-033-00	METAL GLAZE	220	5%	1/10W
R164	1-216-033-00	METAL GLAZE	220	5%	1/10W
R165	1-216-033-00	METAL GLAZE	220	5%	1/10W
R171	1-216-035-00	METAL GLAZE	270	5%	1/10W
R172	1-216-035-00	METAL GLAZE	270	5%	1/10W
R173	1-216-035-00	METAL GLAZE	270	5%	1/10W
R204	1-249-377-11	CARBON	0.47	5%	1/4W F
R206	1-216-022-00	METAL GLAZE	75	5%	1/10W
R213	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R214	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R215	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R216	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R217	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R218	1-216-022-00	METAL GLAZE	75	5%	1/10W
R219	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R220	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R221	1-216-022-00	METAL GLAZE	75	5%	1/10W
R222	1-216-022-00	METAL GLAZE	75	5%	1/10W
R223	1-216-022-00	METAL GLAZE	75	5%	1/10W
R224	1-216-017-91	METAL GLAZE	47	5%	1/10W
R225	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R227	1-216-019-00	METAL GLAZE	56	5%	1/10W
R229	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R230	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R231	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R235	1-216-041-00	METAL GLAZE	470	5%	1/10W
R236	1-216-041-00	METAL GLAZE	470	5%	1/10W
R241	1-216-041-00	METAL GLAZE	470	5%	1/10W
R245	1-216-041-00	METAL GLAZE	470	5%	1/10W
R255	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R258	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R260	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R261	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R262	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R263	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R264	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R265	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R266	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R268	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R275	1-216-033-00	METAL GLAZE	220	5%	1/10W
R276	1-216-033-00	METAL GLAZE	220	5%	1/10W
R277	1-216-025-91	METAL GLAZE	100	5%	1/10W
R278	1-216-025-91	METAL GLAZE	100	5%	1/10W
R279	1-216-025-91	METAL GLAZE	100	5%	1/10W
R280	1-216-041-00	METAL GLAZE	470	5%	1/10W
R281	1-216-041-00	METAL GLAZE	470	5%	1/10W
R282	1-216-041-00	METAL GLAZE	470	5%	1/10W
R283	1-216-041-00	METAL GLAZE	470	5%	1/10W
R284	1-216-041-00	METAL GLAZE	470	5%	1/10W
R285	1-216-041-00	METAL GLAZE	470	5%	1/10W
R286	1-216-025-91	METAL GLAZE	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R287	1-216-025-91	METAL GLAZE	100	5%	1/10W
R288	1-216-025-91	METAL GLAZE	100	5%	1/10W
R289	1-216-025-91	METAL GLAZE	100	5%	1/10W
R290	1-216-025-91	METAL GLAZE	100	5%	1/10W
R291	1-216-025-91	METAL GLAZE	100	5%	1/10W
R294	1-216-043-91	METAL GLAZE	560	5%	1/10W
R295	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R296	1-216-025-91	METAL GLAZE	100	5%	1/10W
R297	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R299	1-216-041-00	METAL GLAZE	470	5%	1/10W
R301	1-216-041-00	METAL GLAZE	470	5%	1/10W
R302	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R303	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R304	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R305	1-216-033-00	METAL GLAZE	220	5%	1/10W
R306	1-216-041-00	METAL GLAZE	470	5%	1/10W
R307	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R308	1-216-017-91	METAL GLAZE	47	5%	1/10W
R309	1-216-017-91	METAL GLAZE	47	5%	1/10W
R310	1-216-017-91	METAL GLAZE	47	5%	1/10W
R314	1-216-033-00	METAL GLAZE	220	5%	1/10W
R315	1-216-033-00	METAL GLAZE	220	5%	1/10W
R319	1-216-033-00	METAL GLAZE	220	5%	1/10W
R320	1-216-033-00	METAL GLAZE	220	5%	1/10W
R322	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R323	1-216-025-91	METAL GLAZE	100	5%	1/10W
R324	1-216-025-91	METAL GLAZE	100	5%	1/10W
R325	1-216-025-91	METAL GLAZE	100	5%	1/10W
R326	1-208-786-11	METAL GLAZE	1.5K	0.50%	1/10W
R327	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R328	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R330	1-216-025-91	METAL GLAZE	100	5%	1/10W
R331	1-216-025-91	METAL GLAZE	100	5%	1/10W
R332	1-216-035-00	METAL GLAZE	270	5%	1/10W
R333	1-208-810-11	METAL GLAZE	15K	0.50%	1/10W
R334	1-216-043-91	METAL GLAZE	560	5%	1/10W
R335	1-216-033-00	METAL GLAZE	220	5%	1/10W
R337	1-216-033-00	METAL GLAZE	220	5%	1/10W
R338	1-216-033-00	METAL GLAZE	220	5%	1/10W
R339	1-216-033-00	METAL GLAZE	220	5%	1/10W
R340	1-216-025-91	METAL GLAZE	100	5%	1/10W
R342	1-216-025-91	METAL GLAZE	100	5%	1/10W
R343	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R344	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R345	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R346	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R347	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R348	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R349	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R350	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R351	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R352	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R353	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R354	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R355	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R356	1-216-025-91	METAL GLAZE	100	5%	1/10W
R357	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R360	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R361	1-216-041-00	METAL GLAZE	470	5%	1/10W
R362	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R363	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R364	1-208-783-11	METAL GLAZE	1.1K	0.50%	1/10W
R365	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R366	1-216-017-91	METAL GLAZE	47	5%	1/10W
R367	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R368	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R369	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R370	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R371	1-216-077-00	METAL GLAZE	15K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R372	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R373	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R374	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R375	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R376	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R377	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R378	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R379	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R380	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R381	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R384	1-249-377-11	CARBON	0.47	5%	1/4W F
R401	1-249-377-11	CARBON	0.47	5%	1/4W F
R402	1-249-377-11	CARBON	0.47	5%	1/4W F
R403	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R404	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R406	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R407	1-216-025-91	METAL GLAZE	100	5%	1/10W
R408	1-216-025-91	METAL GLAZE	100	5%	1/10W
R412	1-216-025-91	METAL GLAZE	100	5%	1/10W
R413	1-216-025-91	METAL GLAZE	100	5%	1/10W
R414	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R415	1-216-041-00	METAL GLAZE	470	5%	1/10W
R416	1-216-041-00	METAL GLAZE	470	5%	1/10W
R418	1-216-025-91	METAL GLAZE	100	5%	1/10W
R423	1-216-025-91	METAL GLAZE	100	5%	1/10W
R424	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R425	1-216-041-00	METAL GLAZE	470	5%	1/10W
R427	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R428	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R429	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R430	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R432	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R433	1-216-011-00	METAL GLAZE	27	5%	1/10W
R434	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R435	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R436	1-216-011-00	METAL GLAZE	27	5%	1/10W
R437	1-249-418-11	CARBON	1.2K	5%	1/4W F
R438	1-249-418-11	CARBON	1.2K	5%	1/4W F
R439	1-249-389-11	CARBON	4.7	5%	1/4W F
R440	1-249-389-11	CARBON	4.7	5%	1/4W F
R441	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R442	1-216-025-91	METAL GLAZE	100	5%	1/10W
R443	1-216-295-91	CONDUCTOR, CHIP			
R444	1-216-295-91	CONDUCTOR, CHIP			
R1101	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1102	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R1103	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1104	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1105	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1106	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R1107	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1108	1-215-900-11	METAL OXIDE	22K	5%	2W F
R1501	1-216-354-11	METAL OXIDE	2.7	5%	1W F
R1502	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1504	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1506	1-215-888-00	METAL OXIDE	220	5%	2W F
R1507	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1508	1-249-383-11	CARBON	1.5	5%	1/4W F
R1509	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1510	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1511	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1518	1-216-354-11	METAL OXIDE	2.7	5%	1W F
R1520	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1522	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1523	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1524	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1525	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R1526	1-216-686-11	METAL CHIP	30K	0.50%	1/10W

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R1527	1-216-097-91	METAL GLAZE 100K	5%	1/10W	
R1528	1-216-089-91	METAL GLAZE 47K	5%	1/10W	
R1529	1-216-025-91	METAL GLAZE 100	5%	1/10W	
R2106	1-216-025-91	METAL GLAZE 100	5%	1/10W	
R2109	1-216-041-00	METAL GLAZE 470	5%	1/10W	
R2110	1-216-073-00	METAL GLAZE 10K	5%	1/10W	
R2111	1-216-089-91	METAL GLAZE 47K	5%	1/10W	
R2112	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R2201	1-216-041-00	METAL GLAZE 470	5%	1/10W	
R2202	1-216-041-00	METAL GLAZE 470	5%	1/10W	
R2203	1-216-025-91	METAL GLAZE 100	5%	1/10W	
R2204	1-216-045-00	METAL GLAZE 680	5%	1/10W	
R2205	1-216-041-00	METAL GLAZE 470	5%	1/10W	
R2208	1-216-041-00	METAL GLAZE 470	5%	1/10W	
R2209	1-216-041-00	METAL GLAZE 470	5%	1/10W	
		<THERMISTOR>			
TH1501	1-800-193-00	THERMISTOR			
		<TUNER>			
TU1101 ⚠	8-598-340-00	TUNER BTF-WA404			
TU1102 ⚠	8-598-339-00	TUNER BTF-LA402			
		<CRYSTAL>			
X001	1-577-358-21	VIBRATOR, CERAMIC			
X002	1-578-774-11	VIBRATOR, CRYSTAL			
X301	1-567-505-11	OSCILLATOR, CRYSTAL			
X304	1-577-611-11	OSCILALTOR, CERAMIC			

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* A-1298-067-A A BOARD, COMPLETE (except KP-41T35)
****

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

C001	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C004	1-126-933-11	ELECT	100MF	20%	16V
C005	1-126-964-11	ELECT	10MF	20%	50V
C006	1-101-004-00	CERAMIC	0.01MF		50V
C017	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C018	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C019	1-126-960-11	ELECT	1MF	20%	50V
C021	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C024	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C025	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C026	1-107-693-11	ELECT	10MF	20%	16V
C027	1-126-935-11	ELECT	470MF	20%	16V
C028	1-107-693-11	ELECT	10MF	20%	16V
C032	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C033	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C034	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V
C035	1-104-664-11	ELECT	47MF	20%	25V
C036	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C037	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C038	1-126-960-11	ELECT	1MF	20%	50V
C045	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C046	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C047	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V
C048	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C054	1-163-033-91	CERAMIC CHIP	0.022MF		50V
C057	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C092	1-163-259-91	CERAMIC CHIP	220PF	5%	50V
C107	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C108	1-104-664-11	ELECT	47MF	20%	25V
C109	1-126-935-11	ELECT	470MF	20%	16V
C110	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C111	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C119	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C120	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C121	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C124	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C201	1-126-960-11	ELECT	1MF	20%	50V
C202	1-126-935-11	ELECT	470MF	20%	16V
C203	1-126-935-11	ELECT	470MF	20%	16V
C204	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C205	1-126-964-11	ELECT	10MF	20%	50V
C206	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C207	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C208	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C209	1-126-964-11	ELECT	10MF	20%	50V
C210	1-126-964-11	ELECT	10MF	20%	50V
C211	1-126-964-11	ELECT	10MF	20%	50V
C212	1-126-964-11	ELECT	10MF	20%	50V
C213	1-126-964-11	ELECT	10MF	20%	50V
C214	1-126-964-11	ELECT	10MF	20%	50V
C215	1-126-964-11	ELECT	10MF	20%	50V
C216	1-126-964-11	ELECT	10MF	20%	50V
C218	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C219	1-126-964-11	ELECT	10MF	20%	50V
C220	1-126-964-11	ELECT	10MF	20%	50V
C221	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C224	1-104-664-11	ELECT	47MF	20%	25V
C226	1-126-964-11	ELECT	10MF	20%	50V
C227	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C229	1-126-964-11	ELECT	10MF	20%	50V
C230	1-126-964-11	ELECT	10MF	20%	50V
C231	1-126-933-11	ELECT	100MF	20%	16V
C232	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C302	1-126-959-11	ELECT	0.47MF	20%	50V
C303	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C304	1-126-964-11	ELECT	10MF	20%	50V
C305	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C309	1-126-933-11	ELECT	100MF	20%	16V
C310	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C311	1-115-419-11	CERAMIC CHIP	3300PF	5%	25V
C312	1-126-959-11	ELECT	0.47MF	20%	50V
C313	1-137-399-11	FILM	0.1MF	5%	50V
C314	1-137-399-11	FILM	0.1MF	5%	50V
C315	1-137-399-11	FILM	0.1MF	5%	50V
C316	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C317	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C318	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C319	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C320	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C321	1-126-963-11	ELECT	4.7MF	20%	50V
C322	1-130-495-00	MYLAR	0.1MF	5%	50V
C323	1-137-581-11	FILM	0.1MF	5%	100V
C324	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V
C325	1-126-959-11	ELECT	0.47MF	20%	50V
C326	1-126-964-11	ELECT	10MF	20%	50V
C327	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V
C329	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C330	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C331	1-126-959-11	ELECT	0.47MF	20%	50V
C332	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C333	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C334	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C335	1-126-935-11	ELECT	470MF	20%	16V
C337	1-126-960-11	ELECT	1MF	20%	50V
C338	1-126-961-11	ELECT	2.2MF	20%	50V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C339	1-126-959-11	ELECT	0.47MF	20%	50V
C342	1-137-399-11	FILM	0.1MF	5%	50V
C344	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C349	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
C351	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C401	1-126-964-11	ELECT	10MF	20%	50V
C402	1-126-964-11	ELECT	10MF	20%	50V
C403	1-137-367-11	FILM	0.0033MF	5%	50V
C404	1-137-367-11	FILM	0.0033MF	5%	50V
C405	1-137-399-11	FILM	0.1MF	5%	50V
C406	1-137-399-11	FILM	0.1MF	5%	50V
C407	1-126-960-11	ELECT	1MF	20%	50V
C408	1-137-367-11	FILM	0.0033MF	5%	50V
C409	1-137-367-11	FILM	0.0033MF	5%	50V
C410	1-137-399-11	FILM	0.1MF	5%	50V
C411	1-137-399-11	FILM	0.1MF	5%	50V
C412	1-126-933-11	ELECT	100MF	20%	16V
C413	1-128-551-11	ELECT	22MF	20%	25V
C414	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C415	1-126-964-11	ELECT	10MF	20%	50V
C416	1-126-964-11	ELECT	10MF	20%	50V
C417	1-126-964-11	ELECT	10MF	20%	50V
C418	1-104-664-11	ELECT	47MF	20%	25V
C421	1-126-963-11	ELECT	4.7MF	20%	50V
C422	1-104-664-11	ELECT	47MF	20%	25V
C424	1-126-961-11	ELECT	2.2MF	20%	50V
C425	1-126-935-11	ELECT	470MF	20%	16V
C426	1-126-964-11	ELECT	10MF	20%	50V
C427	1-126-933-11	ELECT	100MF	20%	16V
C428	1-126-969-11	ELECT	220MF	20%	50V
C429	1-126-967-11	ELECT	47MF	20%	50V
C430	1-126-964-11	ELECT	10MF	20%	50V
C431	1-126-969-11	ELECT	220MF	20%	50V
C432	1-136-173-00	FILM	0.47MF	5%	50V
C433	1-137-399-11	FILM	0.1MF	5%	50V
C434	1-128-550-11	ELECT	2200MF	20%	50V
C435	1-137-399-11	FILM	0.1MF	5%	50V
C436	1-128-548-11	ELECT	4700MF	20%	25V
C437	1-128-548-11	ELECT	4700MF	20%	25V
C438	1-126-964-11	ELECT	10MF	20%	50V
C439	1-126-964-11	ELECT	10MF	20%	50V
C440	1-126-964-11	ELECT	10MF	20%	50V
C441	1-126-964-11	ELECT	10MF	20%	50V
C1101	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1102	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1103	1-126-933-11	ELECT	100MF	20%	16V
C1104	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1105	1-126-960-11	ELECT	1MF	20%	50V
C1106	1-126-933-11	ELECT	100MF	20%	16V
C1107	1-104-664-11	ELECT	47MF	20%	25V
C1108	1-126-964-11	ELECT	10MF	20%	50V
C1109	1-126-933-11	ELECT	100MF	20%	16V
C1110	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1111	1-126-960-11	ELECT	1MF	20%	50V
C1112	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1113	1-126-964-11	ELECT	10MF	20%	50V
C1114	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1115	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1116	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1117	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1118	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1119	1-126-968-11	ELECT	100MF	20%	50V
C1120	1-126-933-11	ELECT	100MF	20%	16V
C1122	1-104-664-11	ELECT	47MF	20%	25V
C1201	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1202	1-126-964-11	ELECT	10MF	20%	50V
C1203	1-126-964-11	ELECT	10MF	20%	50V
C1204	1-137-367-11	FILM	0.0033MF	5%	50V
C1205	1-126-959-11	ELECT	0.47MF	20%	50V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1206	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1207	1-126-964-11	ELECT	10MF	20%	50V
C1208	1-126-933-11	ELECT	100MF	20%	16V
C1209	1-137-368-11	FILM	0.0047MF	5%	50V
C1210	1-130-489-00	FILM	0.033MF	5%	50V
C1211	1-126-957-11	ELECT	0.22MF	20%	50V
C1212	1-126-957-11	ELECT	0.22MF	20%	50V
C1216	1-126-959-11	ELECT	0.47MF	20%	50V
C1218	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1219	1-137-368-11	FILM	0.0047MF	5%	50V
C1220	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C1221	1-104-664-11	ELECT	47MF	20%	25V
C1501	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1502	1-107-504-11	CERAMIC	10PF	0.5PF	500V
C1503	1-136-177-00	FILM	1MF	5%	50V
C1506	1-126-969-11	ELECT	220MF	20%	50V
C1507	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1508	1-137-378-11	FILM	0.22MF	5%	50V
C1509	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1510	1-126-942-61	ELECT	1000MF	20%	25V
C1511	1-126-942-61	ELECT	1000MF	20%	25V
C1513	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1514	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1517	1-126-964-11	ELECT	10MF	20%	50V
C1518	1-126-933-11	ELECT	100MF	20%	16V
C1519	1-126-933-11	ELECT	100MF	20%	16V
C1520	1-126-964-11	ELECT	10MF	20%	50V
C1521	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C1522	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1523	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1524	1-137-150-11	MYLAR	0.01MF	10%	100V
C1601	1-126-933-11	ELECT	100MF	20%	16V
C1602	1-126-933-11	ELECT	100MF	20%	16V
C1603	1-126-916-11	ELECT	1000MF	20%	6.3V
C1604	1-126-934-11	ELECT	220MF	20%	16V
C1605	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1606	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1607	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1608	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1609	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C1610	1-126-933-11	ELECT	100MF	20%	16V
C1611	1-163-031-11	CERAMIC CHIP	0.01MF		50V
C2105	1-126-964-11	ELECT	10MF	20%	50V
C2106	1-163-038-91	CERAMIC CHIP	0.1MF		25V
C2107	1-126-964-11	ELECT	10MF	20%	50V

<CONNECTOR>

CN001	*1-564-507-11	PLUG, CONNECTOR 4P
CN002	*1-564-511-11	PLUG, CONNECTOR 8P
CN003	*1-774-183-11	CONNECTOR, BOARD TOBOARD10P
CN004	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P
CN301	*1-774-183-11	CONNECTOR, BOARD TOBOARD10P
CN302	*1-564-508-11	PLUG, CONNECTOR 5P
CN303	*1-564-512-11	PLUG, CONNECTOR 9P
CN304	1-770-155-21	CONNECTOR, BOARD TO BOARD 8P
CN305	1-573-298-21	CONNECTOR, BOARD TO BOARD 20P
CN401	*1-564-507-11	PLUG, CONNECTOR 4P
CN402	*1-564-506-11	PLUG, CONNECTOR 3P
CN1101	*1-564-514-11	PLUG, CONNECTOR 11P
CN1501	*1-564-506-11	PLUG, CONNECTOR 3P
CN1601	*1-774-183-11	CONNECTOR, BOARD TOBOARD10P
CN1602	*1-774-183-11	CONNECTOR, BOARD TOBOARD10P

<DIODE>

D001	8-719-991-33	DIODE 1SS133T-77
D002	8-719-991-33	DIODE 1SS133T-77
D003	8-719-991-33	DIODE 1SS133T-77
D004	8-719-991-33	DIODE 1SS133T-77

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION	REMARK
D007	8-719-109-89	DIODE RD5.6ESB2	
D008	8-719-991-33	DIODE 1SS133T-77	
D010	8-719-109-89	DIODE RD5.6ESB2	
D201	8-719-109-89	DIODE RD5.6ESB2	
D202	8-719-110-17	DIODE RD10ESB2	
D203	8-719-109-89	DIODE RD5.6ESB2	
D204	8-719-109-89	DIODE RD5.6ESB2	
D205	8-719-110-17	DIODE RD10ESB2	
D206	8-719-977-28	DIODE DTZ10B	
D207	8-719-977-28	DIODE DTZ10B	
D208	8-719-977-28	DIODE DTZ10B	
D209	8-719-977-28	DIODE DTZ10B	
D210	8-719-977-28	DIODE DTZ10B	
D211	8-719-977-28	DIODE DTZ10B	
D212	8-719-977-28	DIODE DTZ10B	
D213	8-719-977-28	DIODE DTZ10B	
D214	8-719-110-17	DIODE RD10ESB2	
D215	8-719-110-17	DIODE RD10ESB2	
D216	8-719-110-17	DIODE RD10ESB2	
D217	8-719-110-17	DIODE RD10ESB2	
D218	8-719-110-17	DIODE RD10ESB2	
D219	8-719-110-17	DIODE RD10ESB2	
D220	8-719-110-17	DIODE RD10ESB2	
D221	8-719-110-17	DIODE RD10ESB2	
D222	8-719-110-17	DIODE RD10ESB2	
D225	8-719-110-17	DIODE RD10ESB2	
D226	8-719-110-17	DIODE RD10ESB2	
D232	8-719-983-38	DIODE MTZJ-T-77-36B	
D234	8-719-110-17	DIODE RD10ESB2	
D235	8-719-110-17	DIODE RD10ESB2	
D236	8-719-110-17	DIODE RD10ESB2	
D237	8-719-110-17	DIODE RD10ESB2	
D238	8-719-110-17	DIODE RD10ESB2	
D239	8-719-991-33	DIODE 1SS133T-77	
D240	8-719-991-33	DIODE 1SS133T-77	
D241	8-719-991-33	DIODE 1SS133T-77	
D305	8-719-110-17	DIODE RD10ESB2	
D401	8-719-991-33	DIODE 1SS133T-77	
D403	8-719-983-38	DIODE MTZJ-T-77-36B	
D404	8-719-991-33	DIODE 1SS133T-77	
D405	8-719-991-33	DIODE 1SS133T-77	
D406	8-719-991-33	DIODE 1SS133T-77	
D407	8-719-991-33	DIODE 1SS133T-77	
D408	8-719-991-33	DIODE 1SS133T-77	
D409	8-719-991-33	DIODE 1SS133T-77	
D410	8-719-983-38	DIODE MTZJ-T-77-36B	
D411	8-719-929-15	DIODE HZS9.1NB2	
D1101	8-719-982-26	DIODE MTZJ-33B	
D1102	8-719-977-28	DIODE DTZ10B	
D1103	8-719-977-28	DIODE DTZ10B	
D1104	8-719-977-28	DIODE DTZ10B	
D1105	8-719-977-28	DIODE DTZ10B	
D1106	8-719-977-28	DIODE DTZ10B	
D1107	8-719-977-28	DIODE DTZ10B	
D1501	8-719-109-89	DIODE RD5.6ESB2	
D1502	8-719-908-03	DIODE GP08D	
		<FERRITE BEAD>	
FB1102	1-414-135-11	INDUCTOR CHIP 0UH	
		<IC>	
IC001	8-752-886-54	IC CXP85856A-002S	
IC002	8-752-861-57	IC CXP85112B-613S	
IC003	8-759-352-91	IC PST9143NL	
IC004	8-759-352-91	IC PST9143NL	
IC007	8-759-518-23	IC X24C04S8	
IC201	8-759-366-78	IC MM1313AD	
IC202	8-759-100-96	IC uPC4558G2	
IC301	⚠8-752-076-76	IC CXA2025AS	
IC401	8-759-369-39	IC BH3856FS-E2	
IC402	8-759-100-96	IC uPC4558G2	
IC403	8-759-089-13	IC TDA7262	
IC1101	8-759-231-53	IC TA7805S	
IC1201	8-759-988-36	IC BA14741F	
IC1202	8-759-988-36	IC BA14741F	
IC1203	8-759-208-09	IC TC4052BFHB	
IC1204	8-759-100-96	IC uPC4558G2	
IC1501	8-759-192-71	IC STV9379	
IC1502	8-759-251-31	IC CA0007AM	
IC1601	8-759-198-03	IC PQ09RF21	
IC1602	8-759-231-53	IC TA7805S	
IC2102	8-759-700-07	IC NJM2903M	
		<JACK>	
J201	1-507-667-00	JACK, MIC	
J203	1-507-667-00	JACK, MIC	
J204	1-507-667-00	JACK, MIC	
J205	1-774-750-11	JACK BLOCK, PIN	
J206	1-774-749-11	JACK BLOCK, PIN	
J207	1-774-749-11	JACK BLOCK, PIN	
J208	1-774-749-11	JACK BLOCK, PIN	
J209	1-774-751-11	TERMINAL BLOCK, S	
		<CHIP CONDUCTOR>	
JR001	1-216-295-91	CONDUCTOR, CHIP	
JR002	1-216-295-91	CONDUCTOR, CHIP	
JR201	1-216-295-91	CONDUCTOR, CHIP	
JR202	1-216-295-91	CONDUCTOR, CHIP	
JR1501	1-216-295-91	CONDUCTOR, CHIP	
JR1502	1-216-295-91	CONDUCTOR, CHIP	
JR1601	1-216-295-91	CONDUCTOR, CHIP	
JR1603	1-216-295-91	CONDUCTOR, CHIP	
JR1604	1-216-295-91	CONDUCTOR, CHIP	
JR1605	1-216-295-91	CONDUCTOR, CHIP	
JR1606	1-216-295-91	CONDUCTOR, CHIP	
JR1607	1-216-295-91	CONDUCTOR, CHIP	
JR1608	1-216-295-91	CONDUCTOR, CHIP	
JR1609	1-216-295-91	CONDUCTOR, CHIP	
JR1610	1-216-295-91	CONDUCTOR, CHIP	
JR1611	1-216-295-91	CONDUCTOR, CHIP	
JR1612	1-216-295-91	CONDUCTOR, CHIP	
JR1613	1-216-295-91	CONDUCTOR, CHIP	
JR1614	1-216-295-91	CONDUCTOR, CHIP	
JR1615	1-216-295-91	CONDUCTOR, CHIP	
JR1616	1-216-295-91	CONDUCTOR, CHIP	
JR1617	1-216-295-91	CONDUCTOR, CHIP	
JR1618	1-216-295-91	CONDUCTOR, CHIP	
JR1619	1-216-295-91	CONDUCTOR, CHIP	
JR1620	1-216-295-91	CONDUCTOR, CHIP	
JR1621	1-216-295-91	CONDUCTOR, CHIP	
JR1622	1-216-295-91	CONDUCTOR, CHIP	
JR1623	1-216-295-91	CONDUCTOR, CHIP	
JR1624	1-216-295-91	CONDUCTOR, CHIP	
JR1625	1-216-295-91	CONDUCTOR, CHIP	
JR1626	1-216-295-91	CONDUCTOR, CHIP	
JR1627	1-216-295-91	CONDUCTOR, CHIP	
		<COIL>	
L002	1-410-482-31	INDUCTOR 100UH	
L003	1-410-482-31	INDUCTOR 100UH	
L004	1-216-295-91	CONDUCTOR, CHIP	
L005	1-216-295-91	CONDUCTOR, CHIP	

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REF NO	PART NO.	DESCRIPTION	REMARK
L006	1-410-470-11	INDUCTOR 10UH	
L007	1-410-482-31	INDUCTOR 100UH	
L201	1-410-478-11	INDUCTOR 47UH	
L302	1-410-482-31	INDUCTOR 100UH	
L303	1-410-470-11	INDUCTOR 10UH	
L1101	1-410-478-11	INDUCTOR 47UH	
L1103	1-410-478-11	INDUCTOR 47UH	
L1104	1-410-478-11	INDUCTOR 47UH	
L1105	1-410-470-11	INDUCTOR 10UH	
L1106	1-410-478-11	INDUCTOR 47UH	
L1501	1-412-524-11	INDUCTOR 8.2UH	
L1502	1-412-533-21	INDUCTOR 47UH	
L1503	1-412-533-21	INDUCTOR 47UH	
		<NEON LAMP>	
NL1501	1-519-108-99	LAMP, NEON	
		<IC LINK>	
PS401	1-532-984-11	LINK, IC (2A/90V)	
		<TRANSISTOR>	
Q001	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q002	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q003	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q004	8-729-216-22	TRANSISTOR 2SA1162-G	
Q005	8-729-216-22	TRANSISTOR 2SA1162-G	
Q006	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q007	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q008	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q009	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q013	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q015	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q016	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q017	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q201	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q202	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q203	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q205	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q206	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q207	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q208	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q209	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q213	8-729-216-22	TRANSISTOR 2SA1162-G	
Q214	8-729-216-22	TRANSISTOR 2SA1162-G	
Q216	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q217	8-729-027-56	TRANSISTOR DTC143TKA-T146	
Q218	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q219	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q220	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q222	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q226	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q301	8-729-216-22	TRANSISTOR 2SA1162-G	
Q302	8-729-216-22	TRANSISTOR 2SA1162-G	
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q304	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q305	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q306	8-729-216-22	TRANSISTOR 2SA1162-G	
Q307	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q308	8-729-216-22	TRANSISTOR 2SA1162-G	
Q311	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q312	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q313	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q314	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q401	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q402	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q403	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q404	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q405	8-729-216-22	TRANSISTOR 2SA1162-G	
Q406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q407	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q408	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q409	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q410	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q411	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q1101	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q1501	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2105	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q2106	8-729-422-27	TRANSISTOR 2SD601A-Q	
		<RESISTOR>	
R001	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R002	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R003	1-216-295-91	CONDUCTOR, CHIP	
R004	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R005	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R006	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R007	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R008	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R009	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R010	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R011	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R012	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R013	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R014	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R015	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R016	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R017	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R018	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R019	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R020	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R021	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R022	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R023	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R024	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R025	1-216-097-91	METAL GLAZE 100K 5% 1/10W	
R026	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R027	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R029	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R030	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R033	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R034	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R035	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R036	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R037	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R038	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R039	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R040	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R041	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R042	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R043	1-216-065-00	METAL GLAZE 4 7K 5% 1/10W	
R045	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R046	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R047	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R048	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R050	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R053	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R054	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R056	1-216-121-91	METAL GLAZE 1M 5% 1/10W	
R057	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R058	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R059	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R060	1-216-033-00	METAL GLAZE 220 5% 1/10W	

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R061	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R062	1-216-033-00	METAL GLAZE	220	5%	1/10W
R063	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R064	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R065	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R066	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R067	1-216-033-00	METAL GLAZE	220	5%	1/10W
R068	1-216-033-00	METAL GLAZE	220	5%	1/10W
R070	1-216-033-00	METAL GLAZE	220	5%	1/10W
R071	1-216-033-00	METAL GLAZE	220	5%	1/10W
R072	1-216-033-00	METAL GLAZE	220	5%	1/10W
R073	1-216-033-00	METAL GLAZE	220	5%	1/10W
R074	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R075	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R076	1-216-033-00	METAL GLAZE	220	5%	1/10W
R077	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R078	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R080	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R081	1-216-033-00	METAL GLAZE	220	5%	1/10W
R084	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R085	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R086	1-216-033-00	METAL GLAZE	220	5%	1/10W
R087	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R088	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R090	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R091	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R092	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R099	1-216-037-00	METAL GLAZE	330	5%	1/10W
R106	1-216-033-00	METAL GLAZE	220	5%	1/10W
R111	1-216-033-00	METAL GLAZE	220	5%	1/10W
R112	1-216-033-00	METAL GLAZE	220	5%	1/10W
R113	1-216-033-00	METAL GLAZE	220	5%	1/10W
R115	1-216-033-00	METAL GLAZE	220	5%	1/10W
R117	1-216-033-00	METAL GLAZE	220	5%	1/10W
R118	1-216-033-00	METAL GLAZE	220	5%	1/10W
R119	1-216-033-00	METAL GLAZE	220	5%	1/10W
R120	1-216-033-00	METAL GLAZE	220	5%	1/10W
R121	1-216-033-00	METAL GLAZE	220	5%	1/10W
R122	1-216-033-00	METAL GLAZE	220	5%	1/10W
R123	1-216-033-00	METAL GLAZE	220	5%	1/10W
R124	1-216-033-00	METAL GLAZE	220	5%	1/10W
R125	1-216-033-00	METAL GLAZE	220	5%	1/10W
R126	1-216-033-00	METAL GLAZE	220	5%	1/10W
R127	1-216-033-00	METAL GLAZE	220	5%	1/10W
R128	1-216-033-00	METAL GLAZE	220	5%	1/10W
R131	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R132	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R133	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R147	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R148	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R149	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R154	1-216-025-91	METAL GLAZE	100	5%	1/10W
R155	1-216-025-91	METAL GLAZE	100	5%	1/10W
R156	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R157	1-216-017-91	METAL GLAZE	47	5%	1/10W
R158	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R159	1-216-017-91	METAL GLAZE	47	5%	1/10W
R160	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R161	1-216-017-91	METAL GLAZE	47	5%	1/10W
R163	1-216-033-00	METAL GLAZE	220	5%	1/10W
R164	1-216-033-00	METAL GLAZE	220	5%	1/10W
R165	1-216-033-00	METAL GLAZE	220	5%	1/10W
R171	1-216-035-00	METAL GLAZE	270	5%	1/10W
R172	1-216-035-00	METAL GLAZE	270	5%	1/10W
R173	1-216-035-00	METAL GLAZE	270	5%	1/10W
R201	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R202	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R203	1-216-022-00	METAL GLAZE	75	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R204	1-249-377-11	CARBON	0.47	5%	1/4W F
R206	1-216-022-00	METAL GLAZE	75	5%	1/10W
R210	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R211	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R212	1-216-041-00	METAL GLAZE	470	5%	1/10W
R213	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R214	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R215	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R216	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R217	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R218	1-216-022-00	METAL GLAZE	75	5%	1/10W
R219	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R220	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R221	1-216-022-00	METAL GLAZE	75	5%	1/10W
R222	1-216-022-00	METAL GLAZE	75	5%	1/10W
R223	1-216-022-00	METAL GLAZE	75	5%	1/10W
R224	1-216-017-91	METAL GLAZE	47	5%	1/10W
R225	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R226	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R227	1-216-019-00	METAL GLAZE	56	5%	1/10W
R228	1-216-017-91	METAL GLAZE	47	5%	1/10W
R229	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R230	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R231	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R235	1-216-041-00	METAL GLAZE	470	5%	1/10W
R236	1-216-041-00	METAL GLAZE	470	5%	1/10W
R241	1-216-041-00	METAL GLAZE	470	5%	1/10W
R245	1-216-041-00	METAL GLAZE	470	5%	1/10W
R246	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R250	1-216-041-00	METAL GLAZE	470	5%	1/10W
R251	1-216-041-00	METAL GLAZE	470	5%	1/10W
R255	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R258	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R260	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R261	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R262	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R263	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R264	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R265	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R266	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R268	1-216-105-91	METAL GLAZE	220K	5%	1/10W
R273	1-216-041-00	METAL GLAZE	470	5%	1/10W
R274	1-216-019-00	METAL GLAZE	56	5%	1/10W
R275	1-216-033-00	METAL GLAZE	220	5%	1/10W
R276	1-216-033-00	METAL GLAZE	220	5%	1/10W
R277	1-216-025-91	METAL GLAZE	100	5%	1/10W
R278	1-216-025-91	METAL GLAZE	100	5%	1/10W
R279	1-216-025-91	METAL GLAZE	100	5%	1/10W
R280	1-216-041-00	METAL GLAZE	470	5%	1/10W
R281	1-216-041-00	METAL GLAZE	470	5%	1/10W
R282	1-216-041-00	METAL GLAZE	470	5%	1/10W
R283	1-216-041-00	METAL GLAZE	470	5%	1/10W
R284	1-216-041-00	METAL GLAZE	470	5%	1/10W
R285	1-216-041-00	METAL GLAZE	470	5%	1/10W
R286	1-216-025-91	METAL GLAZE	100	5%	1/10W
R287	1-216-025-91	METAL GLAZE	100	5%	1/10W
R288	1-216-025-91	METAL GLAZE	100	5%	1/10W
R289	1-216-025-91	METAL GLAZE	100	5%	1/10W
R290	1-216-025-91	METAL GLAZE	100	5%	1/10W
R291	1-216-025-91	METAL GLAZE	100	5%	1/10W
R294	1-216-043-91	METAL GLAZE	560	5%	1/10W
R295	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R296	1-216-025-91	METAL GLAZE	100	5%	1/10W
R297	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R298	1-216-041-00	METAL GLAZE	470	5%	1/10W
R299	1-216-041-00	METAL GLAZE	470	5%	1/10W
R301	1-216-041-00	METAL GLAZE	470	5%	1/10W
R302	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R303	1-216-049-91	METAL GLAZE	1K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R304	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R305	1-216-033-00	METAL GLAZE	220	5%	1/10W
R306	1-216-025-91	METAL GLAZE	100	5%	1/10W
R307	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R308	1-216-017-91	METAL GLAZE	47	5%	1/10W
R309	1-216-017-91	METAL GLAZE	47	5%	1/10W
R310	1-216-017-91	METAL GLAZE	47	5%	1/10W
R314	1-216-033-00	METAL GLAZE	220	5%	1/10W
R315	1-216-033-00	METAL GLAZE	220	5%	1/10W
R319	1-216-033-00	METAL GLAZE	220	5%	1/10W
R320	1-216-033-00	METAL GLAZE	220	5%	1/10W
R321	1-216-395-00	METAL OXIDE	3.3	5%	3W F
R322	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R323	1-216-025-91	METAL GLAZE	100	5%	1/10W
R324	1-216-025-91	METAL GLAZE	100	5%	1/10W
R325	1-216-025-91	METAL GLAZE	100	5%	1/10W
R326	1-208-786-11	METAL GLAZE	1.5K	0.50%	1/10W
R327	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R328	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R330	1-216-025-91	METAL GLAZE	100	5%	1/10W
R331	1-216-025-91	METAL GLAZE	100	5%	1/10W
R332	1-216-035-00	METAL GLAZE	270	5%	1/10W
R333	1-208-810-11	METAL GLAZE	15K	0.50%	1/10W
R334	1-216-043-91	METAL GLAZE	560	5%	1/10W
R335	1-216-033-00	METAL GLAZE	220	5%	1/10W
R337	1-216-033-00	METAL GLAZE	220	5%	1/10W
R338	1-216-033-00	METAL GLAZE	220	5%	1/10W
R339	1-216-033-00	METAL GLAZE	220	5%	1/10W
R340	1-216-025-91	METAL GLAZE	100	5%	1/10W
R342	1-216-025-91	METAL GLAZE	100	5%	1/10W
R343	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R344	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R345	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R346	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R347	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R348	1-216-133-00	METAL GLAZE	3.3M	5%	1/10W
R349	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R350	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R351	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R352	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R353	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R354	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R355	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R356	1-216-025-91	METAL GLAZE	100	5%	1/10W
R357	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R361	1-216-041-00	METAL GLAZE	470	5%	1/10W
R362	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R363	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R364	1-208-783-11	METAL GLAZE	1.1K	0.50%	1/10W
R365	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R366	1-216-017-91	METAL GLAZE	47	5%	1/10W
R367	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R368	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R369	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R370	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R371	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R372	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R373	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R374	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R375	1-216-101-00	METAL GLAZE	150K	5%	1/10W
R376	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R377	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R378	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R379	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R380	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R381	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R384	1-249-377-11	CARBON	0.47	5%	1/4W F
R401	1-249-377-11	CARBON	0.47	5%	1/4W F
R402	1-249-377-11	CARBON	0.47	5%	1/4W F
R403	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R404	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R405	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R406	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R407	1-216-025-91	METAL GLAZE	100	5%	1/10W
R408	1-216-025-91	METAL GLAZE	100	5%	1/10W
R409	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R410	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R411	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R412	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R413	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R414	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R415	1-216-041-00	METAL GLAZE	470	5%	1/10W
R416	1-216-041-00	METAL GLAZE	470	5%	1/10W
R417	1-249-402-11	CARBON	56	5%	1/4W F
R418	1-216-025-91	METAL GLAZE	100	5%	1/10W
R419	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R420	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R421	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R423	1-216-025-91	METAL GLAZE	100	5%	1/10W
R424	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R425	1-216-041-00	METAL GLAZE	470	5%	1/10W
R427	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R428	1-216-033-00	METAL GLAZE	220	5%	1/10W
R429	1-216-033-00	METAL GLAZE	220	5%	1/10W
R430	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R432	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R433	1-216-011-00	METAL GLAZE	27	5%	1/10W
R434	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R435	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R436	1-216-011-00	METAL GLAZE	27	5%	1/10W
R437	1-249-420-11	CARBON	1.8K	5%	1/4W F
R438	1-249-420-11	CARBON	1.8K	5%	1/4W F
R439	1-249-389-11	CARBON	4.7	5%	1/4W F
R440	1-249-389-11	CARBON	4.7	5%	1/4W F
R441	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R442	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1101	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1102	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R1103	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1104	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1105	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1106	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R1107	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1108	1-215-900-11	METAL OXIDE	22K	5%	2W F
R1201	1-216-039-00	METAL GLAZE	390	5%	1/10W
R1202	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1203	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1204	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R1205	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R1206	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1207	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1208	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1209	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1210	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R1211	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R1212	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1213	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1214	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1215	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1216	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1217	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1218	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R1219	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1220	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1221	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1222	1-216-073-00	METAL GLAZE	10K	5%	1/10W

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

• The components identified by ☒ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R1223	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R1224	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1225	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1226	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1227	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1228	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R1229	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1230	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1231	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1232	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1233	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R1234	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1235	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R1236	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1237	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1239	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1240	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1241	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1242	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1245	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W
R1246	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1247	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1248	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1249	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1250	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1251	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1252	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1253	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1254	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R1255	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R1258	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R1259	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1501	1-216-354-11	METAL OXIDE	2.7	5%	1W F
R1502	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1504	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1506	1-215-888-00	METAL OXIDE	220	5%	2W F
R1507	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R1508	1-249-383-11	CARBON	1.5	5%	1/4W F
R1509	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1510	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R1511	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1518	1-216-354-11	METAL OXIDE	2.7	5%	1W F
R1520	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1522	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1523	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1524	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1525	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R1526	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R1527	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R1528	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1529	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2103	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2106	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2107	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2108	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R2109	1-216-041-00	METAL GLAZE	470	5%	1/10W
R2110	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2111	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R2112	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2113	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2117	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R2118	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R2121	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R2122	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2125	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R2201	1-216-041-00	METAL GLAZE	470	5%	1/10W
R2202	1-216-041-00	METAL GLAZE	470	5%	1/10W
R2203	1-216-025-91	METAL GLAZE	100	5%	1/10W
R2204	1-216-045-00	METAL GLAZE	680	5%	1/10W
R2205	1-216-041-00	METAL GLAZE	470	5%	1/10W
R2208	1-216-041-00	METAL GLAZE	470	5%	1/10W
R2209	1-216-041-00	METAL GLAZE	470	5%	1/10W

<RELAY>

RY401	1-755-028-11	RELAY
RY402	1-755-028-11	RELAY

<TERMINAL BOARD>

TB201	1-694-303-11	TERMINAL, PUSH

<THERMISTOR>

TH1501	1-800-193-00	THERMISTOR

<TUNER>

TU1101	⚠ 8-598-140-00	TUNER BTF-WA404
TU1102	⚠ 8-598-339-00	TUNER BTF-LA402

<CRYSTAL>

X001	1-577-358-21	VIBRATOR, CERAMIC
X002	1-578-774-11	VIBRATOR, CRYSTAL
X301	1-567-505-11	OSCILLATOR, CRYSTAL
X304	1-577-611-11	OSCILALTOR, CERAMIC

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*	A-1316-313-A	G BOARD, COMPLETE (KP-53V45)
		**********
*	A-1316-314-A	G BOARD, COMPLETE (KP-48V45/61V45)
		**********
*	A-1316-317-A	G BOARD, COMPLETE (KP-41T35)
		**********
*	4-057-835-01	PLATE, TRANSFORMER SHIELD
	4-382-854-11	SCREW (M3X10), P, SW (+)
	7-682-952-09	SCREW +PSW 3X16

<CAPACITOR>

C502	1-126-959-11	ELECT	0.47MF	20%	50V
C504	1-102-116-00	CERAMIC	680PF	10%	50V
C505	1-130-471-00	MYLAR	0.001MF	5%	50V
C506	1-126-933-11	ELECT	100MF	20%	16V
C507	1-126-965-11	ELECT	22MF	20%	50V
C508	1-102-212-00	CERAMIC	820PF	10%	500V
C509	1-106-383-00	MYLAR	0.047MF	10%	200V
C510	1-102-002-00	CERAMIC	680PF	10%	500V
C511	1-130-475-00	MYLAR	0.0022MF	5%	50V
C512	1-130-471-00	FILM	0.001MF	5%	50V
C513	1-126-965-11	ELECT	22MF	20%	50V
C514	⚠	CERAMIC			2KV
C515	⚠ 1-129-720-00	FILM	0.033MF	5%	630V
C516	⚠ 1-117-807-11	CAPACITOR	0	0	0
C518	1-130-495-00	MYLAR	0.1MF	5%	50V
C519	1-136-287-11	FILM	0.0047MF	5%	100V
C520	1-162-116-00	CERAMIC	680PF	10%	2KV
C521	1-162-116-00	CERAMIC	680PF	10%	2KV
C523	1-117-813-11	CAPACITOR	0	0	0
C524	1-136-287-11	FILM	0.0047MF	5%	100V
C526	1-102-228-00	CERAMIC	470PF	10%	500V
C527	1-126-967-11	ELECT	47MF	20%	50V
C528	1-107-649-11	ELECT	2.2MF	20%	250V

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Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
C529	1-117-673-11	FILM	1.5MF	5%	200V
C530	1-110-626-11	ELECT	330MF	20%	160V
C531	1-126-971-11	ELECT	470MF	20%	50V
C532	1-126-971-11	ELECT	470MF	20%	50V
C533	1-128-562-11	ELECT	47MF	20%	100V
C535	1-106-387-00	MYLAR	0.068MF	10%	200V
C536	1-137-374-11	FILM	0.047MF	5%	50V
C537	1-126-968-11	ELECT	100MF	20%	50V
C538	1-126-968-11	ELECT	100MF	20%	50V
C539	1-162-114-00	CERAMIC	0.0047MF		2KV
C540	1-130-487-00	MYLAR	0.022MF	5%	50V
C541	1-130-489-00	MYLAR	0.033MF	5%	50V
C542	1-126-969-11	ELECT	220MF	20%	50V
C544	1-104-665-11	ELECT	100MF	20%	25V
C545	1-104-665-11	ELECT	100MF	20%	25V
C546	1-107-637-11	ELECT	22MF	20%	160V
C548	1-102-244-00	CERAMIC	220PF	10%	500V
C550	1-126-935-11	ELECT	470MF	20%	16V
C551	1-126-935-11	ELECT	470MF	20%	16V
C554	1-136-557-11	FILM	0.0033MF	5%	630V
C555	1-126-960-11	ELECT	1MF	20%	50V
C556	1-130-495-00	MYLAR	0.1MF	5%	50V
C602	⚠1-113-890-51	CERAMIC	0.0022MF	20%	250V
C603	1-102-228-00	CERAMIC	470PF	10%	500V
C604	⚠1-136-311-51	FILM	0.47MF	20%	125V
C605	⚠1-113-890-51	CERAMIC	0.0022MF	20%	250V
C606	⚠1-136-311-51	FILM	0.47MF	20%	125V
C607	1-125-692-11	ELECT(BLOCK)	820MF	20%	200V
C608	1-125-692-11	ELECT(BLOCK)	820MF	20%	200V
C612	1-164-646-11	CERAMIC	2200PF	10%	500V
C615	1-136-173-00	FILM	0.47MF	5%	50V
C616	1-136-173-00	FILM	0.47MF	5%	50V
C617	1-136-169-00	FILM	0.22MF	5%	50V
C618	1-136-169-00	FILM	0.22MF	5%	50V
C621	1-129-719-00	FILM	0.027MF	5%	630V
C651	1-126-804-11	ELECT	100MF	20%	35V
C652	1-123-024-21	ELECT	33MF		160V
C653	1-115-755-11	ELECT	180MF	20%	16V
C654	1-115-755-11	ELECT	180MF	20%	16V
C655	1-126-943-11	ELECT	2200MF	20%	25V
C656	1-126-943-11	ELECT	2200MF	20%	25V
C657	1-126-943-11	ELECT	2200MF	20%	25V
C658	1-128-550-11	ELECT	2200MF	20%	50V
C659	1-102-074-00	CERAMIC	0.001MF	10%	50V
C660	1-126-235-11	ELECT	100MF	20%	6.3V
C661	1-102-074-00	CERAMIC	0.001MF	10%	50V
C662	1-104-664-11	ELECT	47MF	20%	25V
C663	1-104-664-11	ELECT	47MF	20%	25V
C664	1-104-664-11	ELECT	47MF	20%	25V
C665	1-104-666-11	ELECT	220MF	20%	25V
C666	1-126-960-11	ELECT	1MF	20%	50V
C667	1-104-664-11	ELECT	47MF	20%	25V
C671	1-104-664-11	ELECT	47MF	20%	25V
C672	1-126-971-11	ELECT	470MF	20%	50V
C673	1-164-644-11	CERAMIC	330PF	10%	500V
C675	1-104-665-11	ELECT	100MF	20%	25V
C676	1-126-960-11	ELECT	1MF	20%	50V
C801	1-104-665-11	ELECT	100MF	20%	25V
C802	1-104-665-11	ELECT	100MF	20%	25V
C803	1-126-934-11	ELECT	220MF	20%	16V
C804	1-126-934-11	ELECT	220MF	20%	16V
C805	1-126-934-11	ELECT	220MF	20%	16V
C806	1-126-934-11	ELECT	220MF	20%	16V
C807	1-137-374-11	FILM	0.047MF	5%	50V
C808	1-137-374-11	FILM	0.047MF	5%	50V
C809	1-137-374-11	FILM	0.047MF	5%	50V
C810	1-137-374-11	FILM	0.047MF	5%	50V
C811	1-137-366-11	FILM	0.0022MF	5%	50V
C812	1-136-169-00	FILM	0.22MF	5%	50V
C813	1-137-374-11	FILM	0.047MF	5%	50V
C815	1-104-665-11	ELECT	100MF	20%	25V
C816	1-126-964-11	ELECT	10MF	20%	50V
C818	1-126-933-11	ELECT	100MF	20%	16V
C819	1-126-964-11	ELECT	10MF	20%	50V
C820	1-102-114-00	CERAMIC	470PF	10%	50V
C821	1-130-495-00	MYLAR	0.1MF	5%	50V
C823	1-101-880-00	CERAMIC	47PF	5%	50V
C825	1-104-665-11	ELECT	100MF	20%	25V
C826	1-136-165-00	FILM	0.1MF	5%	50V
C827	1-126-960-11	ELECT	1MF	20%	50V
C828	1-137-366-11	FILM	0.0022MF	5%	50V
C829	1-126-959-11	ELECT	0.47MF	20%	50V
C830	1-130-467-00	FILM	470PF	5%	50V
C831	1-126-960-11	ELECT	1MF	20%	50V
C832	1-126-960-11	ELECT	1MF	20%	50V
C833	1-126-960-11	ELECT	1MF	20%	50V
C834	1-126-968-11	ELECT	100MF	20%	50V
C835	1-126-967-11	ELECT	47MF	20%	50V
C836	1-136-169-00	FILM	0.22MF	5%	50V
C837	1-126-963-11	ELECT	4.7MF	20%	50V
C838	1-104-665-11	ELECT	100MF	20%	25V
C839	1-137-374-11	FILM	0.047MF	5%	50V
C840	1-104-665-11	ELECT	100MF	20%	25V
C841	1-137-374-11	FILM	0.047MF	5%	50V
C842	1-137-374-11	FILM	0.047MF	5%	50V
C843	1-126-968-11	ELECT	100MF	20%	50V
C844	1-126-933-11	ELECT	100MF	20%	16V
C845	1-126-933-11	ELECT	100MF	20%	16V
C846	1-126-933-11	ELECT	100MF	20%	16V
C847	1-126-933-11	ELECT	100MF	20%	16V
C848	1-126-933-11	ELECT	100MF	20%	16V
C851	1-137-374-11	FILM	0.047MF	5%	50V
C852	1-137-374-11	FILM	0.047MF	5%	50V
C853	1-137-374-11	FILM	0.047MF	5%	50V
C854	1-126-933-11	ELECT	100MF	20%	16V
C857	1-126-933-11	ELECT	100MF	20%	16V
C858	1-104-665-11	ELECT	100MF	20%	25V
C860	1-126-933-11	ELECT	100MF	20%	16V
C861	1-137-374-11	FILM	0.047MF	5%	50V
C862	1-137-374-11	FILM	0.047MF	5%	50V
C863	1-137-374-11	FILM	0.047MF	5%	50V
C864	1-126-933-11	ELECT	100MF	20%	16V
C865	1-130-471-00	MYLAR	0.001MF	5%	50V
C866	1-136-177-00	FILM	1MF	5%	50V
C867	1-101-880-00	CERAMIC	47PF	5%	50V
C868	1-101-880-00	CERAMIC	47PF	5%	50V
C869	1-130-489-00	MYLAR	0.033MF	5%	50V
C871	1-101-880-00	CERAMIC	47PF	5%	50V
C872	1-101-880-00	CERAMIC	47PF	5%	50V
C873	1-101-880-00	CERAMIC	47PF	5%	50V
C880	1-126-961-11	ELECT	2.2MF	20%	50V
C881	1-102-973-00	CERAMIC	100PF	5%	50V
C882	1-102-973-00	CERAMIC	100PF	5%	50V
C883	1-102-973-00	CERAMIC	100PF	5%	50V
C884	1-104-665-11	ELECT	100MF	20%	25V
C885	1-126-961-11	ELECT	2.2MF	20%	50V
C886	1-102-973-00	CERAMIC	100PF	5%	50V
C887	1-102-973-00	CERAMIC	100PF	5%	50V
C888	1-102-973-00	CERAMIC	100PF	5%	50V
C889	1-104-665-11	ELECT	100MF	20%	25V
C897	1-104-665-11	ELECT	100MF	20%	25V

<CONNECTOR>

CN501	*1-564-513-11	PLUG, CONNECTOR 10P
CN502	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P
CN503	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION	REMARK
CN504	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P	
CN505	*1-506-371-00	PIN, CONNECTOR 2P	
CN506	*1-774-182-11	CONNECTOR, BOARD TO BOARD10P	
CN507	*1-564-507-11	PLUG, CONNECTOR 4P	
CN601	*1-580-843-11	PIN, CONNECTOR (POWER)	
CN651	*1-774-182-11	CONNECTOR, BOARD TO BOARD10P	
CN652	*1-774-182-11	CONNECTOR, BOARD TO BOARD10P	
CN653	*1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P	
CN801	*1-564-507-11	PLUG, CONNECTOR 4P	
CN802	*1-564-507-11	PLUG, CONNECTOR 4P	
CN803	*1-564-507-11	PLUG, CONNECTOR 4P	
CN804	*1-774-182-11	CONNECTOR, BOARD TO BOARD10P	
CN805	*1-691-134-11	PIN, CONNECTOR (PC BOARD) 2P	
		<DIODE>	
D501	8-719-991-33	DIODE 1SS133T-77	
D502	8-719-991-33	DIODE 1SS133T-77	
D504	8-719-921-63	DIODE MTZJ-7.5B	
D507	⚠8-719-302-43	DIODE EL1Z	
D508	8-719-900-26	DIODE ERD29-08J	
D509	8-719-945-80	DIODE ERC06-15S	
D510	8-719-945-80	DIODE ERC06-15S	
D511	8-719-302-43	DIODE EL1Z	
D513	8-719-302-43	DIODE EL1Z	
D514	8-719-908-03	DIODE GP08D	
D515	8-719-908-03	DIODE GP08D	
D517	8-719-018-82	DIODE RGP02-20EL-6394	
D519	8-719-991-33	DIODE 1SS133T-77	
D520	8-719-302-43	DIODE EL1Z	
D521	8-719-302-43	DIODE EL1Z	
D524	8-719-991-33	DIODE 1SS133T-77	
D527	8-719-109-85	DIODE RD5.1ESB2	
D528	8-719-923-86	DIODE MTZJ-T-77-15	
D602	⚠8-719-052-84	DIODE LN4SB60	
D651	8-719-510-26	DIODE D1NL20-TA	
D652	8-719-991-33	DIODE 1SS133T-77	
D653	8-719-510-02	DIODE D1NS4	
D654	8-719-022-97	DIODE D2S4MF	
D655	8-719-061-56	DIODE RBA-402LLF-A	
D656	8-719-052-92	DIODE D10SBS4F	
D657	8-719-052-91	DIODE D4SBS4-F	
D658	8-719-510-12	DIODE D10SC4M	
D660	8-719-991-33	DIODE 1SS133T-77	
D661	8-719-200-82	DIODE 11ES2	
D662	8-719-991-33	DIODE 1SS133T-77	
D664	8-719-110-61	DIODE RD24ESB1	
D669	8-719-991-33	DIODE 1SS133T-77	
D670	8-719-921-86	DIODE MTZJ-13	
D691	8-719-200-82	DIODE 11ES2	
D692	8-719-200-82	DIODE 11ES2	
D693	8-719-200-82	DIODE 11ES2	
D694	8-719-200-82	DIODE 11ES2	
D801	8-719-110-17	DIODE RD10ESB2	
D802	8-719-110-17	DIODE RD10ESB2	
D803	8-719-110-17	DIODE RD10ESB2	
D804	8-719-110-17	DIODE RD10ESB2	
D820	8-719-109-68	DIODE RD3.6ESB1	
D828	8-719-109-89	DIODE RD5.6ESB2	
D829	8-719-109-84	DIODE RD5.1ESB1	
D835	8-719-109-89	DIODE RD5.6ESB2	
D840	8-719-991-33	DIODE 1SS133T-77	
D842	8-719-991-33	DIODE 1SS133T-77	
D845	8-719-991-33	DIODE 1SS133T-77	
D846	8-719-991-33	DIODE 1SS133T-77	
D847	8-719-982-19	DIODE MTZJ-30A	
D848	8-719-923-86	DIODE MTZJ-T-77-15	
D849	8-719-110-22	DIODE RD11ESB2	
D850	8-719-109-89	DIODE RD5.6ESB2	
D852	8-719-923-86	DIODE MTZJ-T-77-15	
D853	8-719-982-19	DIODE MTZJ-30A	
D854	8-719-982-19	DIODE MTZJ-30A	
D855	8-719-982-19	DIODE MTZJ-30A	
D856	8-719-923-86	DIODE MTZJ-T-77-15	
D857	8-719-982-19	DIODE MTZJ-30A	
D859	8-719-923-86	DIODE MTZJ-T-77-15	
D860	8-719-982-19	DIODE MTZJ-30A	
		<FUSE>	
F601	⚠1-532-748-11	FUSE, GLASS TUBE 6.3A/125V	
	1-533-223-11	CLIP, FUSE ; F601	
		<FERRITE BEAD>	
FB501	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB651	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB652	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB653	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB654	1-410-397-21	FERRITE BEAD INDUCTOR	
FB655	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB656	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB657	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
FB660	1-412-761-11	INDUCTOR, FERRITE BEAD	
FB661	1-412-761-11	INDUCTOR, FERRITE BEAD	
		<IC>	
IC501	8-759-133-90	IC uPC339C	
IC601	⚠8-729-041-12	TRANSISTOR MX0841AB-F	
IC651	⚠1-510-651-11	POWER MODULE DM-48	
IC651	8-749-012-13	IC DM-58	
IC652	8-759-012-67	IC MC7905CT	
IC653	8-759-231-53	IC TA7805S	
IC654	8-759-231-53	IC TA7805S	
IC655	8-759-231-58	IC TA7812S	
IC801	8-759-327-51	IC PA0053B	
IC802	8-759-327-51	IC PA0053B	
IC803	8-759-183-37	IC CA0007AD	
IC804	8-759-464-79	IC PM0011AS	
IC805	8-759-711-28	IC NJM2058D	
IC806	8-759-464-79	IC PM0011AS	
IC808	8-759-464-79	IC PM0011AS	
IC809	8-749-012-97	IC STK392-110	
IC810	8-749-012-97	IC STK392-110	
IC811	8-759-634-51	IC M5218AP	
		<COIL>	
L502	1-410-478-11	INDUCTOR 47UH	
L503	1-459-111-00	COIL, DRAM CORE (CDI)	
L506	1-412-552-11	INDUCTOR 2.2mH	
L509	1-412-533-21	INDUCTOR 47UH	
L601	⚠1-424-248-11	TRANSFORMER, LINE FILTER	
L651	1-414-158-11	INDUCTOR 2.2UH	
L652	1-414-158-11	INDUCTOR 2.2UH	
L653	1-414-158-11	INDUCTOR 2.2UH	
L654	1-414-158-11	INDUCTOR 2.2UH	
L656	1-412-523-11	INDUCTOR 6.8UH	
L801	1-406-975-21	COIL, CHOKE 47UH	
L802	1-406-975-21	COIL, CHOKE 47UH	
		<NEON LAMP>	
NL501	1-519-108-99	LAMP, NEON	

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• The components identified by ⊠ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION				REMARK
		<IC LINK>				
PS601	⚠1-533-597-21	LINK, IC				
PS602	⚠1-533-597-21	LINK, IC				
		<TRANSISTOR>				
Q501	8-729-119-80	TRANSISTOR 2SC2688-LK				
Q502	8-729-024-05	TRANSISTOR 2SD2348(LBSONY-1)				
Q503	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q504	8-729-823-81	TRANSISTOR 2SC4632LS-CB7				
Q505	8-729-931-45	TRANSISTOR IRF614				
Q506	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q507	8-729-032-61	TRANSISTOR 2SC5022-02				
Q651	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q652	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q653	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q654	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q655	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q656	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q657	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q658	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q659	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q660	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q661	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q662	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q802	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q803	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q809	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q810	8-729-119-78	TRANSISTOR 2SC2785-HFE				
		<RESISTOR>				
R501	1-249-421-11	CARBON	2.2K	5%	1/4W	
R502	1-215-879-11	METAL OXIDE	47K	5%	1W	F
R503	1-247-843-11	CARBON	3.3K	5%	1/4W	
R504	1-249-419-11	CARBON	1.5K	5%	1/4W	
R506	1-215-444-00	METAL	9.1K	1%	1/4W	
R507	1-249-422-11	CARBON	2.7K	5%	1/4W	
R508	1-260-337-11	CARBON	5.6K	5%	1/2W	
R509	1-249-437-11	CARBON	47K	5%	1/4W	
R510	1-215-919-11	METAL OXIDE	2.2K	5%	3W	F
R511	1-215-919-11	METAL OXIDE	2.2K	5%	3W	F
R512	1-216-482-11	METAL OXIDE	1.8K	5%	3W	F
R513	1-249-424-11	CARBON	3.9K	5%	1/4W	
⊠R514	⚠	METAL			1/4W	
R516	1-215-443-00	METAL	8.2K	1%	1/4W	
R517	1-215-449-00	METAL	15K	1%	1/4W	
R518	1-215-456-00	METAL	30K	1%	1/4W	
R519	1-247-863-91	CARBON	22K	5%	1/4W	
R522	1-249-428-11	CARBON	8.2K	5%	1/4W	
R523	1-249-437-11	CARBON	47K	5%	1/4W	
R524	1-247-863-91	CARBON	22K	5%	1/4W	
R525	1-249-405-11	CARBON	100	5%	1/4W	F
R528	1-215-910-00	METAL OXIDE	68	5%	3W	F
R530	1-249-437-11	CARBON	47K	5%	1/4W	
R531	1-260-326-11	CARBON	680	5%	1/2W	
R532	1-260-313-51	CARBON	56	5%	1/2W	
R533	1-214-912-00	METAL	91K	1%	1/2W	
R534	1-215-479-00	METAL	270K	1%	1/4W	
R535	1-247-887-00	CARBON	220K	5%	1/4W	
R536	1-249-377-11	CARBON	0.47	5%	1/4W	F
R537	1-260-336-11	CARBON	4.7K	5%	1/2W	
R538	1-247-863-91	CARBON	22K	5%	1/4W	
R539	1-249-377-11	CARBON	0.47	5%	1/4W	F
R540	1-249-379-11	CARBON	0.68	5%	1/4W	F (41T35)
R540	1-249-379-11	CARBON	0.68	5%	1/4W	F (except 41T35)
R541	1-247-807-31	CARBON	100	5%	1/4W	
R542	1-215-862-11	METAL OXIDE	68	5%	1W	F (except 53V45)
R542	1-215-864-00	METAL OXIDE	150	5%	1W	F (53V45)
R543	1-216-349-00	METAL OXIDE	1	5%	1W	F
R544	1-215-862-11	METAL OXIDE	68	5%	1W	F (except 53V45)
R544	1-215-864-00	METAL OXIDE	150	5%	1W	F (53V45)
R545	1-249-377-11	CARBON	0.47	5%	1/4W	F
R546	1-249-377-11	CARBON	0.47	5%	1/4W	F
R547	1-247-807-31	CARBON	100	5%	1/4W	
R548	1-249-413-11	CARBON	470	5%	1/4W	
R549	1-247-863-91	CARBON	22K	5%	1/4W	
R550	1-247-807-31	CARBON	100	5%	1/4W	
R551	1-249-437-11	CARBON	47K	5%	1/4W	
R552	1-247-807-31	CARBON	100	5%	1/4W	
R553	1-247-881-00	CARBON	120K	5%	1/4W	
R554	1-249-405-11	CARBON	100	5%	1/4W	F
R556	1-260-123-11	CARBON	100K	5%	1/2W	
R557	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R558	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R559	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R560	1-215-399-00	METAL	120	1%	1/4W	
⊠R561	⚠	METAL			1/4W	
R563	1-249-429-11	CARBON	10K	5%	1/4W	
R564	1-260-131-11	CARBON	470K	5%	1/2W	
R565	1-247-807-31	CARBON	100	5%	1/4W	
R566	1-249-377-11	CARBON	0.47	5%	1/4W	F
R567	1-249-377-11	CARBON	0.47	5%	1/4W	F
R568	1-247-903-00	CARBON	1M	5%	1/4W	
R569	1-216-390-11	METAL OXIDE	1.2	5%	3W	F (41T35)
R569	1-216-392-11	METAL OXIDE	1.8	5%	3W	F (except 41T35)
R570	1-215-910-00	METAL OXIDE	68	5%	3W	F
R571	1-249-422-11	CARBON	2.7K	5%	1/4W	
R572	1-247-895-91	CARBON	470K	5%	1/4W	
R573	1-249-430-11	CARBON	12K	5%	1/4W	
R574	1-249-429-11	CARBON	10K	5%	1/4W	
R577	1-249-422-11	CARBON	2.7K	5%	1/4W	
R579	1-247-895-91	CARBON	470K	5%	1/4W	
R580	1-249-434-11	CARBON	27K	5%	1/4W	
R581	1-249-429-11	CARBON	10K	5%	1/4W	
R583	1-249-428-11	CARBON	8.2K	5%	1/4W	
R584	1-247-887-00	CARBON	220K	5%	1/4W	
R585	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R586	1-260-292-11	CARBON	1	5%	1/2W	
R588	1-247-863-91	CARBON	22K	5%	1/4W	
R589	1-247-887-00	CARBON	220K	5%	1/4W	
R591	1-215-917-11	METAL OXIDE	1K	5%	3W	F
R601	⚠1-219-512-91	RESISTOR(SURGE RESISTANT)	2.2M			
R602	⚠1-202-981-21	WIREWOUND	0.82	5%	20W	
R608	⚠1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R609	1-247-887-00	CARBON	220K	5%	1/4W	
R610	1-247-887-00	CARBON	220K	5%	1/4W	
R611	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R612	1-247-887-00	CARBON	220K	5%	1/4W	
R613	1-216-353-00	METAL OXIDE	2.2	5%	1W	F
R614	1-247-887-00	CARBON	220K	5%	1/4W	
R651	1-249-429-11	CARBON	10K	5%	1/4W	
R652	1-249-425-11	CARBON	4.7K	5%	1/4W	
R653	1-249-377-11	CARBON	0.47	5%	1/4W	F
R655	1-247-887-00	CARBON	220K	5%	1/4W	
R656	1-260-288-11	CARBON	0.47	5%	1/2W	
R657	1-249-429-11	CARBON	10K	5%	1/4W	

G

REF. NO.	PART NO.	DESCRIPTION			REMARK
R658	1-249-417-11	CARBON	1K	5%	1/4W
R660	1-249-413-11	CARBON	470	5%	1/4W
R661	1-249-417-11	CARBON	1K	5%	1/4W F
R662	1-249-425-11	CARBON	4.7K	5%	1/4W
R664	1-249-425-11	CARBON	4.7K	5%	1/4W
R665	1-247-807-31	CARBON	100	5%	1/4W
R667	1-249-417-11	CARBON	1K	5%	1/4W
R668	1-249-377-11	CARBON	0.47	5%	1/4W F
R669	1-249-429-11	CARBON	10K	5%	1/4W
R672	1-249-421-11	CARBON	2.2K	5%	1/4W
R673	1-249-413-11	CARBON	470	5%	1/4W
R675	1-215-417-00	METAL	680	1%	1/4W
R676	1-216-369-00	METAL OXIDE	1	5%	2W F
R677	1-247-807-31	CARBON	100	5%	1/4W
R679	1-249-421-11	CARBON	2.2K	5%	1/4W
R680	1-249-417-11	CARBON	1K	5%	1/4W
R681	1-249-417-11	CARBON	1K	5%	1/4W
R682	1-249-417-11	CARBON	1K	5%	1/4W
R683	1-249-417-11	CARBON	1K	5%	1/4W
R684	1-249-417-11	CARBON	1K	5%	1/4W
R686	1-215-421-00	METAL	1K	1%	1/4W
R687	1-215-441-00	METAL	6.8K	1%	1/4W
R688	1-215-481-00	METAL	330K	1%	1/4W
R689	1-249-425-11	CARBON	4.7K	5%	1/4W
R690	1-249-417-11	CARBON	1K	5%	1/4W
R692	1-249-425-11	CARBON	4.7K	5%	1/4W
R693	1-249-429-11	CARBON	10K	5%	1/4W
R695	1-247-807-31	CARBON	100	5%	1/4W
R696	1-249-417-11	CARBON	1K	5%	1/4W
R697	1-249-417-11	CARBON	1K	5%	1/4W
R801	1-249-437-11	CARBON	47K	5%	1/4W
R803	1-249-430-11	CARBON	12K	5%	1/4W
R804	1-249-429-11	CARBON	10K	5%	1/4W
R805	1-247-807-31	CARBON	100	5%	1/4W
R806	1-249-429-11	CARBON	10K	5%	1/4W
R807	1-247-807-31	CARBON	100	5%	1/4W
R808	1-249-429-11	CARBON	10K	5%	1/4W
R809	1-249-425-11	CARBON	4.7K	5%	1/4W
R810	1-247-807-31	CARBON	100	5%	1/4W
R811	1-247-807-31	CARBON	100	5%	1/4W
R812	1-249-429-11	CARBON	10K	5%	1/4W
R813	1-249-429-11	CARBON	10K	5%	1/4W
R814	1-247-807-31	CARBON	100	5%	1/4W
R815	1-247-807-31	CARBON	100	5%	1/4W
R816	1-247-807-31	CARBON	100	5%	1/4W
R817	1-247-807-31	CARBON	100	5%	1/4W
R818	1-249-430-11	CARBON	12K	5%	1/4W
R820	1-249-429-11	CARBON	10K	5%	1/4W
R821	1-249-428-11	CARBON	8.2K	5%	1/4W
R822	1-249-417-11	CARBON	1K	5%	1/4W
R823	1-249-417-11	CARBON	1K	5%	1/4W
R824	1-215-462-00	METAL	51K	1%	1/4W
R825	1-249-441-11	CARBON	100K	5%	1/4W
R826	1-215-462-00	METAL	51K	1%	1/4W
R827	1-249-417-11	CARBON	1K	5%	1/4W
R828	1-249-426-11	CARBON	5.6K	5%	1/4W
R829	1-249-426-11	CARBON	5.6K	5%	1/4W
R830	1-249-414-11	CARBON	560	5%	1/4W
R831	1-249-414-11	CARBON	560	5%	1/4W
R832	1-249-441-11	CARBON	100K	5%	1/4W
R833	1-249-417-11	CARBON	1K	5%	1/4W
R834	1-249-441-11	CARBON	100K	5%	1/4W
R835	1-249-441-11	CARBON	100K	5%	1/4W
R836	1-247-807-31	CARBON	100	5%	1/4W
R837	1-249-441-11	CARBON	100K	5%	1/4W
R838	1-249-421-11	CARBON	2.2K	5%	1/4W
R841	1-247-815-91	CARBON	220	5%	1/4W
R842	1-247-807-31	CARBON	100	5%	1/4W
R843	1-247-807-31	CARBON	100	5%	1/4W
R844	1-247-807-31	CARBON	100	5%	1/4W
R845	1-249-441-11	CARBON	100K	5%	1/4W
R846	1-247-807-31	CARBON	100	5%	1/4W
R847	1-215-469-00	METAL	100K	1%	1/4W
R850	1-215-469-00	METAL	100K	1%	1/4W
R851	1-247-807-31	CARBON	100	5%	1/4W
R852	1-247-807-31	CARBON	100	5%	1/4W
R853	1-247-887-00	CARBON	220K	5%	1/4W
R854	1-249-429-11	CARBON	10K	5%	1/4W
R855	1-247-815-91	CARBON	220	5%	1/4W
R856	1-247-807-31	CARBON	100	5%	1/4W
R857	1-247-807-31	CARBON	100	5%	1/4W
R858	1-215-455-00	METAL	27K	1%	1/4W
R859	1-215-455-00	METAL	27K	1%	1/4W
R860	1-215-455-00	METAL	27K	1%	1/4W
R861	1-215-455-00	METAL	27K	1%	1/4W
R862	1-215-455-00	METAL	27K	1%	1/4W
R863	1-215-455-00	METAL	27K	1%	1/4W
R865	1-249-424-11	CARBON	3.9K	5%	1/4W
R867	1-215-461-00	METAL	47K	1%	1/4W
R868	1-215-445-00	METAL	10K	1%	1/4W
R869	1-249-425-11	CARBON	4.7K	5%	1/4W
R871	1-249-417-11	CARBON	1K	5%	1/4W
R872	1-249-425-11	CARBON	4.7K	5%	1/4W
R873	1-247-807-31	CARBON	100	5%	1/4W
R874	1-249-429-11	CARBON	10K	5%	1/4W
R875	1-249-441-11	CARBON	100K	5%	1/4W
R879	1-215-444-00	METAL	9.1K	1%	1/4W
R880	1-259-878-11	CARBON	1.5M	5%	1/4W
R881	1-249-408-11	CARBON	180	5%	1/4W
R882	1-215-445-00	METAL	10K	1%	1/4W
R883	1-215-445-00	METAL	10K	1%	1/4W
R884	1-215-445-00	METAL	10K	1%	1/4W
R885	1-249-441-11	CARBON	100K	5%	1/4W
R886	1-249-428-11	CARBON	8.2K	5%	1/4W
R887	1-247-807-31	CARBON	100	5%	1/4W
R888	1-247-807-31	CARBON	100	5%	1/4W
R889	1-249-438-11	CARBON	56K	5%	1/4W
R890	1-249-441-11	CARBON	100K	5%	1/4W
R891	1-249-429-11	CARBON	10K	5%	1/4W
R892	1-215-445-00	METAL	10K	1%	1/4W
R895	1-249-421-11	CARBON	2.2K	5%	1/4W
R896	1-249-441-11	CARBON	100K	5%	1/4W
R897	1-247-807-31	CARBON	100	5%	1/4W
R898	1-247-815-91	CARBON	220	5%	1/4W
R899	1-247-815-91	CARBON	220	5%	1/4W
R901	1-249-430-11	CARBON	12K	5%	1/4W
R902	1-249-438-11	CARBON	56K	5%	1/4W
R903	1-215-421-00	METAL	1K	1%	1/4W
R904	1-214-800-11	METAL	2.2	1%	1/2W
R905	1-214-800-11	METAL	2.2	1%	1/2W
R906	1-214-800-11	METAL	2.2	1%	1/2W
R907	1-247-815-91	CARBON	220	5%	1/4W
R908	1-247-815-91	CARBON	220	5%	1/4W
R909	1-215-421-00	METAL	1K	1%	1/4W
R910	1-215-421-00	METAL	1K	1%	1/4W
R911	1-215-455-00	METAL	27K	1%	1/4W
R912	1-215-469-00	METAL	100K	1%	1/4W
R913	1-215-455-00	METAL	27K	1%	1/4W
R914	1-215-455-00	METAL	27K	1%	1/4W
R915	1-215-455-00	METAL	27K	1%	1/4W
R916	1-215-455-00	METAL	27K	1%	1/4W
R917	1-215-455-00	METAL	27K	1%	1/4W
R918	1-215-455-00	METAL	27K	1%	1/4W
R919	1-249-435-11	CARBON	33K	5%	1/4W
R920	1-214-800-11	METAL	2.2	1%	1/2W
R921	1-249-431-11	CARBON	15K	5%	1/4W
R922	1-215-445-00	METAL	10K	1%	1/4W

G CR

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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified

REF. NO.	PART NO.	DESCRIPTION			REMARK
R923	1-249-425-11	CARBON	4.7K	5%	1/4W
R924	1-215-444-00	METAL	9.1K	1%	1/4W
R925	1-249-425-11	CARBON	4.7K	5%	1/4W
R926	1-249-408-11	CARBON	180	5%	1/4W
R927	1-215-445-00	METAL	10K	1%	1/4W
R928	1-215-445-00	METAL	10K	1%	1/4W
R929	1-214-800-11	METAL	2.2	1%	1/2W
R930	1-214-800-11	METAL	2.2	1%	1/2W
R931	1-215-445-00	METAL	10K	1%	1/4W
R933	1-215-453-00	METAL	22K	1%	1/4W
R934	1-249-429-11	CARBON	10K	5%	1/4W
R935	1-249-429-11	CARBON	10K	5%	1/4W
R936	1-249-429-11	CARBON	10K	5%	1/4W
R937	1-249-435-11	CARBON	33K	5%	1/4W
R938	1-215-421-00	METAL	1K	1%	1/4W
R939	1-259-878-11	CARBON	1.5M	5%	1/4W
R940	1-249-441-11	CARBON	100K	5%	1/4W
R941	1-249-441-11	CARBON	100K	5%	1/4W
R942	1-249-421-11	CARBON	2.2K	5%	1/4W
R943	1-249-441-11	CARBON	100K	5%	1/4W
R944	1-215-421-00	METAL	1K	1%	1/4W
R945	1-249-429-11	CARBON	10K	5%	1/4W
R946	1-215-421-00	METAL	1K	1%	1/4W
R947	1-249-441-11	CARBON	100K	5%	1/4W
R948	1-247-815-91	CARBON	220	5%	1/4W
R949	1-247-807-31	CARBON	100	5%	1/4W
R950	1-247-807-31	CARBON	100	5%	1/4W
R951	1-247-807-31	CARBON	100	5%	1/4W
R952	1-247-807-31	CARBON	100	5%	1/4W
R953	1-247-863-91	CARBON	22K	5%	1/4W
R954	1-215-433-00	METAL	3.3K	1%	1/4W
R955	1-215-433-00	METAL	3.3K	1%	1/4W
R956	1-249-429-11	CARBON	10K	5%	1/4W
R957	1-214-800-11	METAL	2.2	1%	1/2W
R958	1-214-800-11	METAL	2.2	1%	1/2W
R959	1-215-433-00	METAL	3.3K	1%	1/4W
R961	1-249-425-11	CARBON	4.7K	5%	1/4W
R962	1-214-800-11	METAL	2.2	1%	1/2W
R963	1-214-800-11	METAL	2.2	1%	1/2W
R964	1-215-433-00	METAL	3.3K	1%	1/4W
R965	1-215-433-00	METAL	3.3K	1%	1/4W
R966	1-247-815-91	CARBON	220	5%	1/4W
R967	1-215-455-00	METAL	27K	1%	1/4W
R968	1-215-455-00	METAL	27K	1%	1/4W
R969	1-215-455-00	METAL	27K	1%	1/4W
R970	1-215-455-00	METAL	27K	1%	1/4W
R971	1-215-455-00	METAL	27K	1%	1/4W
R972	1-215-455-00	METAL	27K	1%	1/4W
R973	1-214-800-11	METAL	2.2	1%	1/2W
R974	1-215-463-00	METAL	56K	1%	1/4W
R975	1-214-800-11	METAL	2.2	1%	1/2W
R976	1-215-433-00	METAL	3.3K	1%	1/4W
R977	1-247-815-91	CARBON	220	5%	1/4W
R978	1-215-445-00	METAL	10K	1%	1/4W
R979	1-249-425-11	CARBON	4.7K	5%	1/4W
R980	1-247-815-91	CARBON	220	5%	1/4W
R981	1-247-815-91	CARBON	220	5%	1/4W
R982	1-247-895-91	CARBON	470K	5%	1/4W
R983	1-247-815-91	CARBON	220	5%	1/4W
R984	1-215-444-00	METAL	9.1K	1%	1/4W
R985	1-215-445-00	METAL	10K	1%	1/4W
R987	1-249-408-11	CARBON	180	5%	1/4W
R988	1-215-445-00	METAL	10K	1%	1/4W
R989	1-249-425-11	CARBON	4.7K	5%	1/4W
R990	1-249-429-11	CARBON	10K	5%	1/4W
R991	1-249-429-11	CARBON	10K	5%	1/4W
R992	1-259-878-11	CARBON	1.5M	5%	1/4W
R993	1-249-425-11	CARBON	4.7K	5%	1/4W
R994	1-249-425-11	CARBON	4.7K	5%	1/4W
R995	1-249-413-11	CARBON	470	5%	1/4W
R996	1-247-815-91	CARBON	220	5%	1/4W
R997	1-215-445-00	METAL	10K	1%	1/4W
R998	1-249-434-11	CARBON	27K	5%	1/4W
R999	1-249-434-11	CARBON	27K	5%	1/4W

<RELAY>

RY601	⚠1-755-018-11	RELAY	

<TRANSFORMER>

T501	⚠1-437-195-14	TRANSFORMER, HORIZONTAL DRIVE	
T502	⚠1-431-211-11	TRANSFORMER, FERRITE (PMT)	
T503	⚠1-431-212-11	TRANSFORMER, HORIZONTAL LINEAR	
T504	⚠1-453-238-11	TRANSFORMER ASSY, FLYBACK	(NX-4007//X4A4) (except 41T35)
T504	⚠1-453-248-11	TRANSFORMER ASSY, FLYBACK	(NX-4007//X4T4) (41T35)
T603	⚠1-423-665-11	TRANSFORMER, POWER	
T604	⚠1-429-992-11	TRANSFORMER, CONVERTER (PRT)	
T605	⚠1-429-985-11	TRANSFORMER, CONVERTER (PIT)	(41T35)
T605	⚠1-429-986-11	TRANSFORMER, CONVERTER (PIT)	(except 41T35)

<THERMISTOR>

TH801	1-808-269-11	THERMISTOR

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	*A-1331-670-A	CR BOARD, COMPLETE
		**********
	7-322-065-19	RUBBER, SILICON RTV (KE490W)

<CAPACITOR>

C702	1-101-880-00	CERAMIC	47PF	5%	50V
C703	1-104-664-11	ELECT	47MF	20%	25V
C704	1-126-964-11	ELECT	10MF	20%	50V
C705	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C706	1-126-934-11	ELECT	220MF	20%	16V
C707	1-107-504-11	CERAMIC	10PF	0.5PF	500V
C708	1-102-050-00	CERAMIC	0.01MF		500V
C709	1-162-115-00	CERAMIC	330PF	10%	2KV
C712	1-107-662-11	ELECT	22MF	20%	250V

<CONNECTOR>

CN701	1-695-915-11	TAB (CONTACT)
CN702	*1-564-510-11	PLUG, CONNECTOR 7P
CN703	*1-564-512-11	PLUG, CONNECTOR 9P
CN704	*1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P
CN705	⚠1-251-182-11	SOCKET, PICTURE TUBE
CN706	*1-564-512-11	PLUG, CONNECTOR 9P

<DIODE>

D701	8-719-991-33	DIODE 1SS133T-77
D702	8-719-991-33	DIODE 1SS133T-77
D703	8-719-991-33	DIODE 1SS133T-77
D704	8-719-991-33	DIODE 1SS133T-77
D705	8-719-923-86	DIODE MTZJ-T-77-15
D706	8-719-923-86	DIODE MTZJ-T-77-15
D708	8-719-110-17	DIODE RD10ESB2
D709	8-719-109-89	DIODE RD5.6ESB2
D710	8-719-991-33	DIODE 1SS133T-77

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifié.

CR CG CB

REF. NO.	PART NO.	DESCRIPTION				REMARK
		<IC>				
IC701	8-759-434-39	IC TDA6106Q				
		<COIL>				
L701	1-408-429-00	INDUCTOR 470UH				
		<NEON LAMP>				
NL701	1-519-108-99	LAMP, NEON				
		<TRANSISTOR>				
Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q702	8-729-119-76	TRANSISTOR 2SA1175-HFE				
		<RESISTOR>				
R701	1-219-743-11	RESISTOR (SURGE RESISTANT) 100				
R702	1-215-425-00	METAL	1.5K	1%	1/4W	
R703	1-215-437-00	METAL	4.7K	1%	1/4W	
R704	1-260-132-11	CARBON	560K	5%	1/2W	
R705	1-215-424-00	METAL	1.3K	1%	1/4W	
R706	1-215-437-00	METAL	4.7K	1%	1/4W	
R707	1-249-435-11	CARBON	33K	5%	1/4W	
R708	1-215-428-00	METAL	2K	1%	1/4W	
R709	1-260-101-11	CARBON	1.5K	5%	1/2W	
R710	1-215-903-11	METAL OXIDE	68K	5%	2W	F
R711	1-249-435-11	CARBON	33K	5%	1/4W	
R712	1-247-807-31	CARBON	100	5%	1/4W	
R713	1-249-437-11	CARBON	47K	5%	1/4W	
R714	1-260-099-11	CARBON	1K	5%	1/2W	
R715	1-260-133-11	CARBON	680K	5%	1/2W	
R717	1-249-417-11	CARBON	1K	5%	1/4W	
R718	1-247-807-31	CARBON	100	5%	1/4W	
R719	1-260-087-11	CARBON	100	5%	1/2W	
		<SPARK GAP>				
SG701	1-519-422-11	GAP, SPARK				
SG702	1-519-422-11	GAP, SPARK				

****

* A-1331-671-A CG BOARD, COMPLETE
****

7-322-065-19 RUBBER, SILICON RTV (KE490W)

<CAPACITOR>

C732	1-101-880-00	CERAMIC	47PF	5%	50V
C733	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C735	1-102-050-00	CERAMIC	0.01MF		500V
C736	1-162-115-00	CERAMIC	330PF	10%	2KV
C737	1-107-662-11	ELECT	22MF	20%	250V

<CONNECTOR>

CN731	1-695-915-11	TAB (CONTACT)
CN732	*1-564-510-11	PLUG, CONNECTOR 7P
CN733	*1-564-507-11	PLUG, CONNECTOR 4P
CN734	*1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P
CN735	⚠1-251-182-11	SOCKET, PICTURE TUBE
CN736	*1-564-512-11	PLUG, CONNECTOR 9P
CN737	*1-564-512-11	PLUG, CONNECTOR 9P

<DIODE>

D731	8-719-991-33	DIODE 1SS133T-77
D732	8-719-991-33	DIODE 1SS133T-77
D733	8-719-110-17	DIODE RD10ESB2

<IC>

IC731	8-759-434-39	IC TDA6106Q

<COIL>

L731	1-408-429-00	INDUCTOR 470UH

<NEON LAMP>

NL731	1-519-108-99	LAMP, NEON

<RESISTOR>

R731	1-219-743-11	RESISTOR (SURGE RESISTANT) 100				
R732	1-260-132-11	CARBON	560K	5%	1/2W	
R733	1-215-421-00	METAL	1K	1%	1/4W	
R735	1-249-441-11	CARBON	100K	5%	1/4W	
R736	1-215-430-00	METAL	2.4K	1%	1/4W	
R737	1-260-101-11	CARBON	1.5K	5%	1/2W	
R738	1-215-903-11	METAL OXIDE	68K	5%	2W	F
R739	1-260-133-11	CARBON	680K	5%	1/2W	
R740	1-260-099-11	CARBON	1K	5%	1/2W	
R741	1-215-435-00	METAL	3.9K	1%	1/4W	
R742	1-247-885-00	CARBON	180K	5%	1/4W	
R743	1-247-807-31	CARBON	100	5%	1/4W	

<SPARK GAP>

SG731	1-519-422-11	GAP, SPARK
SG732	1-519-422-11	GAP, SPARK

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* A-1331-672-A CB BOARD, COMPLETE
****

7-322-065-19 RUBBER, SILICON RTV (KE490W)

<CAPACITOR>

C762	1-101-880-00	CERAMIC	47PF	5%	50V
C763	1-161-754-00	CERAMIC	0.001MF	10%	2KV
C765	1-102-050-00	CERAMIC	0.01MF		500V
C766	1-162-115-00	CERAMIC	330PF	10%	2KV
C767	1-107-662-11	ELECT	22MF	20%	250V

<CONNECTOR>

CN761	1-695-915-11	TAB (CONTACT)
CN762	*1-564-507-11	PLUG, CONNECTOR 4P
CN763	*1-508-784-00	PIN, CONNECTOR (5mm PITCH) 1P
CN764	⚠1-251-182-11	SOCKET, PICTURE TUBE
CN765	*1-564-512-11	PLUG, CONNECTOR 9P
CN766	*1-564-513-11	PLUG, CONNECTOR 10P

<DIODE>

D761	8-719-991-33	DIODE 1SS133T-77
D762	8-719-923-86	DIODE MTZJ-T-77-15
D763	8-719-110-17	DIODE RD10ESB2
D764	8-719-923-86	DIODE MTZJ-T-77-15

CB HA ZR ZG

REF. NO.	PART NO.	DESCRIPTION				REMARK
		<IC>				
IC761	8-759-434-39	IC TDA6106Q				
		<COIL>				
L761	1-408-429-00	INDUCTOR 470UH				
		<NEON LAMP>				
NL761	1-519-108-99	LAMP, NEON				
		<RESISTOR>				
R761	1-219-743-11	RESISTOR (SURGE RESISTANT) 100				
R762	1-260-132-11	CARBON	560K	5%	1/2W	
R763	1-215-420-00	METAL	910	1%	1/4W	
R764	1-249-426-11	CARBON	5.6K	5%	1/4W	
R765	1-215-430-00	METAL	2.4K	1%	1/4W	
R766	1-260-101-11	CARBON	1.5K	5%	1/2W	
R767	1-215-903-11	METAL OXIDE	68K	5%	2W	F
R768	1-260-133-11	CARBON	680K	5%	1/2W	
R769	1-260-099-11	CARBON	1K	5%	1/2W	
R770	1-247-807-31	CARBON	100	5%	1/4W	
R771	1-260-087-11	CARBON	100	5%	1/2W	
		<SPARK GAP>				
SG761	1-519-422-11	GAP, SPARK				
SG762	1-519-422-11	GAP, SPARK				

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* A-1372-304-A HA BOARD, COMPLETE
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		<CAPACITOR>				
C1301	1-137-399-11	FILM	0.1MF	5%	50V	
C1302	1-126-959-11	ELECT	0.47MF	20%	50V	
C1304	1-126-964-11	ELECT	10MF	20%	50V	
C1305	1-137-399-11	FILM	0.1MF	5%	50V	
C1306	1-126-964-11	ELECT	10MF	20%	50V	
C1307	1-126-964-11	ELECT	10MF	20%	50V	
		<CONNECTOR>				
CN1301	1-564-523-11	PLUG, CONNECTOR 8P				
CN1302	*1-564-526-11	PLUG, CONNECTOR 11P				
CN1304	*1-564-518-11	PLUG, CONNECTOR 3P				
		<DIODE>				
D1301	8-719-110-17	DIODE RD10ESB2				
D1302	8-719-110-17	DIODE RD10ESB2				
D1303	8-719-110-17	DIODE RD10ESB2				
D1304	8-719-053-43	DIODE SLR-325VCT31				
D1305	8-719-053-43	DIODE SLR-325VCT31				
D1306	8-719-110-17	DIODE RD10ESB2				
D1307	8-719-110-17	DIODE RD10ESB2				
D1308	8-719-110-17	DIODE RD10ESB2				
		<IC>				
IC1301	8-741-780-51	IC SBX1780-51				

REF. NO.	PART NO.	DESCRIPTION				REMARK
		<JACK>				
J1301	1-770-361-11	TERMINAL BLOCK, S				
		<RESISTOR>				
R1301	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1302	1-249-416-11	CARBON	820	5%	1/4W	
R1303	1-249-417-11	CARBON	1K	5%	1/4W	
R1304	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1305	1-247-815-91	CARBON	220	5%	1/4W	
R1306	1-247-815-91	CARBON	220	5%	1/4W	
R1307	1-249-420-11	CARBON	1.8K	5%	1/4W	
R1308	1-247-895-91	CARBON	470K	5%	1/4W	
R1309	1-247-895-91	CARBON	470K	5%	1/4W	
R1310	1-249-429-11	CARBON	10K	5%	1/4W	
R1311	1-247-804-11	CARBON	75	5%	1/4W	
R1312	1-247-804-11	CARBON	75	5%	1/4W	
R1314	1-247-807-31	CARBON	100	5%	1/4W	
R1315	1-247-804-11	CARBON	75	5%	1/4W	
		<SWITCH>				
S1301	1-572-198-11	SWITCH, KEYBOARD				
S1302	1-572-198-11	SWITCH, KEYBOARD				
S1303	1-572-198-11	SWITCH, KEYBOARD				
S1304	1-572-198-11	SWITCH, KEYBOARD				
S1305	1-572-198-11	SWITCH, KEYBOARD				
S1306	1-572-198-11	SWITCH, KEYBOARD				
S1307	1-572-198-11	SWITCH, KEYBOARD				

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* A-1390-682-A ZR BOARD, COMPLETE
****

		<CONNECTOR>				
CN1401	*1-564-510-11	PLUG, CONNECTOR 7P				
CN1403	*1-564-506-11	PLUG, CONNECTOR 3P				
CN1404	*1-564-507-11	PLUG, CONNECTOR 4P				
CN1405	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P				
		<CONNECTOR>				
DY1401	1-451-454-11	DEFLECTION YOKE				
		<RESISTOR>				
R1401	1-249-414-11	CARBON	560	5%	1/4W	
R1402	1-249-414-11	CARBON	560	5%	1/4W	
R1415	1-216-475-11	METAL OXIDE	120	5%	3W	F
R1418	1-216-475-11	METAL OXIDE	120	5%	3W	F

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* A-1390-683-A ZG BOARD, COMPLETE
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4-382-854-11 SCREW (M3X10), P, SW (+)

		<CAPACITOR>				
C1433	1-104-999-11	MYLAR	0.1MF	10%	200V	
C1434	1-106-383-00	MYLAR	0.047MF	10%	200V	
C1435	1-107-667-11	ELECT	2.2MF	20%	160V	
C1436	1-137-364-11	FILM	0.001MF	5%	50V	
C1437	1-137-364-11	FILM	0.001MF	5%	50V	

The componants identified by shading and mark ⚠ are critical for safety
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

ZG

REF. NO.	PART NO.	DESCRIPTION			REMARK	
C1438	1-106-383-00	MYLAR	0.047MF	10%	200V	
C1439	1-161-830-00	CERAMIC	0.0047MF		500V	
C1440	1-126-933-11	ELECT	100MF	20%	16V	
C1441	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C1443	1-126-935-11	ELECT	470MF	20%	16V	
C1444	1-107-639-11	ELECT	47MF	20%	160V	
C1445	1-126-933-11	ELECT	100MF	20%	16V	
C1446	1-126-933-11	ELECT	100MF	20%	16V	
		<CONNECTOR>				
CN1431	*1-564-508-11	PLUG, CONNECTOR 5P				
CN1432	*1-564-510-11	PLUG, CONNECTOR 7P				
CN1433	*1-564-507-11	PLUG, CONNECTOR 4P				
CN1434	*1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P				
CN1461	*1-564-506-11	PLUG, CONNECTOR 3P				
CN1462	*1-564-507-11	PLUG, CONNECTOR 4P				
CN1464	*1-564-507-11	PLUG, CONNECTOR 4P				
		<DIODE>				
D1431	8-719-110-88	DIODE RD39ESB2				
D1432	8-719-110-88	DIODE RD39ESB2				
D1433	8-719-991-33	DIODE 1SS133T-77				
		<CONNECTOR>				
DY1431	1-451-454-11	DEFLECTION YOKE				
		<COIL>				
L1431	1-410-478-11	INDUCTOR 47UH				
L1432	1-410-478-11	INDUCTOR 47UH				
		<TRANSISTOR>				
Q1431	8-729-017-06	TRANSISTOR 2SC4793				
Q1432	8-729-017-05	TRANSISTOR 2SA1837				
Q1433	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q1434	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1435	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1436	8-729-119-78	TRANSISTOR 2SC2785-HFE				
		<RESISTOR>				
R1431	1-249-414-11	CARBON	560	5%	1/4W	
R1432	1-249-414-11	CARBON	560	5%	1/4W	
R1435	1-215-908-00	METAL OXIDE	33	5%	3W	F
R1436	1-216-475-11	METAL OXIDE	120	5%	3W	F
R1437	1-249-414-11	CARBON	560	5%	1/4W	
R1438	1-249-432-11	CARBON	18K	5%	1/4W	
R1439	1-249-432-11	CARBON	18K	5%	1/4W	
R1440	1-249-414-11	CARBON	560	5%	1/4W	F
R1441	1-249-417-11	CARBON	1K	5%	1/4W	
R1442	1-247-815-91	CARBON	220	5%	1/4W	
R1443	1-249-377-11	CARBON	0.47	5%	1/4W	F
R1445	1-249-403-11	CARBON	68	5%	1/4W	
R1448	1-249-416-11	CARBON	820	5%	1/4W	
R1449	1-249-403-11	CARBON	68	5%	1/4W	
R1450	1-249-417-11	CARBON	1K	5%	1/4W	
R1451	1-249-411-11	CARBON	330	5%	1/4W	
R1452	1-249-417-11	CARBON	1K	5%	1/4W	
R1453	1-249-401-11	CARBON	47	5%	1/4W	
R1454	1-260-311-11	CARBON	39	5%	1/2W	
R1455	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1456	1-215-916-00	METAL OXIDE	680	5%	3W	F
R1457	1-249-417-11	CARBON	1K	5%	1/4W	F
R1458	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1459	1-249-400-11	CARBON	39	5%	1/4W	F
R1461	1-249-414-11	CARBON	560	5%	1/4W	
R1462	1-249-414-11	CARBON	560	5%	1/4W	
R1463	1-249-399-11	CARBON	33	5%	1/4W	
R1465	1-216-475-11	METAL OXIDE	120	5%	3W	F
R1466	1-216-475-11	METAL OXIDE	120	5%	3W	F

****

MISCELLANEOUS
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⚠	A-1501-086-A	COUPLER (R) ASSY, PICTURE TUBE (41T35)
⚠	A-1501-088-A	COUPLER (B) ASSY, PICTURE TUBE (41T35)
⚠	A-1501-169-A	COUPLER (G) ASSY, PICTURE TUBE (41T35)
⚠	1-223-925-12	RESISTOR ASSY (HIGH-VOLTAGE)
⚠	1-451-454-11	DEFLECTION YOKE (R) (G)
⚠	1-451-455-21	DEFLECTION YOKE (B)
⚠	1-452-790-21	NECK ASSY
	1-452-909-11	MAGNET ASSY, 4 POLE
	1-505-378-11	SPEAKER (10CM) (41T35)
	1-505-426-11	SPEAKER (10.6CM) (except 41T35)
	1-556-945-21	CABLE, P-P
	*1-557-056-41	CABLE, P-P
⚠	1-769-837-11	CORD, POWER(WITH NOISE FILTER)
	1-900-231-42	CONNECTOR ASSY, MV
	1-900-240-39	CONNECTOR ASSY, A MOUNT GND (41T35)
	8-598-414-00	ANTENNA SWITCH AS-2F
⚠	8-598-955-11	BLOCK ASSY, HIGH-VOLTAGE
⚠	8-733-497-05	PICTURE TUBE 07MAC3(B) (CONG NECK) (GA) (48V45/53V45)
⚠	8-733-498-05	PICTURE TUBE 07MAC3(R)(CONG NECK) (GA) (48V45/53V45)
⚠	8-733-507-05	PICTURE TUBE 07MAC4(B) (61V45)
⚠	8-733-508-05	PICTURE TUBE 07MAC4(R) (61V45)
⚠	8-733-494-05	PICTURE TUBE 07MAC2(G) (GC) (except 41T35)

****

ACCESSORIES AND PACKING MATERIALS
****

	3-859-371-11	MANUAL, INSTRUCTION (41T35)
	3-860-212-11	MANUAL, INSTRUCTION (except 41T35)
*	4-037-674-01	BOARD, TOP (48V45)
*	4-041-423-01	SHEET, PROTECTION (41T35)
*	4-041-426-01	BAG, PROTECTION (48V45/53V45)
*	4-041-428-01	BAG, POLYETHYLENE (61V45)
*	4-042-463-01	SHEET, PROTECTION (except 41T35)
*	4-047-555-01	PLATE, TOP (61V45)
*	4-047-774-01	PLATE, TOP (53V45)
*	4-049-155-01	BAG, PROTECTION (41T35)
*	4-056-291-01	INDIVIDUAL CARTON (53V45)
*	4-056-292-01	CUSHION (UPPER) (ASSY) (53V45)
*	4-056-293-01	CUSHION (LOWER) (ASSY) (53V45)
*	4-056-298-01	BOARD, BOTTOM (53V45)
*	4-056-300-01	TRAY (53V45)
*	4-057-558-01	INDIVIDUAL CARTON (41T35)
*	4-057-559-01	TRAY (41T35)
*	4-057-560-01	CUSHION (UPPER) (ASSY) (41T35)
*	4-057-561-01	CUSHION (LOWER) (ASSY) (41T35)
*	4-057-642-01	CUSHION (UPPER) (ASSY) (61V45)
*	4-057-643-01	CUSHION (LOWER) (ASSY) (61V45)
*	4-057-648-01	INDIVIDUAL CARTON (61V45)
*	4-057-649-01	TRAY (61V45)
*	4-057-650-01	BOARD, BOTTOM (61V45)
*	4-057-651-01	CUSHION (UPPER) (ASSY) (48V45)

REF. NO.	PART NO.	DESCRIPTION	REMARK
	*4-057-652-01	CUSHION (LOWER) (ASSY) (48V45)	
	*4-057-657-01	INDIVIDUAL CARTON (48V45)	
	*4-057-658-01	TRAY (48V45)	
	*4-057-659-01	BOARD, BOTTOM (48V45)	
		REMOTE COMMANDER **********	
	1-473-749-31	REMOTE COMMANDER (RM-Y136A)	(41T35)
	4-978-977-01	POCKET, COVER (FOR RM-Y136A) (41T35)	
	1-475-215-11	REMOTE COMMANDER (RM-Y901)	(except 41T35)
	4-978-977-01	POCKET, COVER (FOR RM-Y901)	(except 41T35)

Sony Corporation
Display Company
Quality Assurance Department
Service Promotion Section

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